

GARDINER, SONS & Co., Ltd., — BRISTOL.

WAREHOUSES AND SHOWROOMS,
NELSON STREET.
Telephone: No. 278.

ALL SAINTS' IRONWORKS,
ALL SAINTS' STREET.
Telephone: No. 762.

MIDLAND IRONWORKS,
WILLWAY STREET.
Telephone: No. 867.

Containing one of the largest stocks in the Kingdom of Castings, Brass Foundry, Chimney Pieces, Grates, Kitchen Ranges, Gas Fittings, and every description of Builders' Ironmongery.

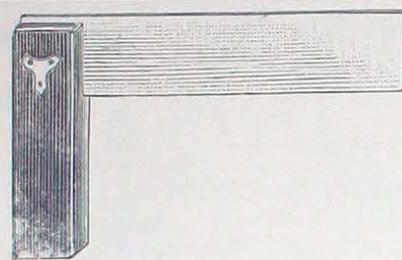
SPECIALITIES:—Wrought Iron Sashes, Casements, Gates and Railings, Vanes, Finials, Lifts, and Ornamental Metal Work.

SPECIALITIES:—Constructional Ironwork, Girders, Roofs, and Iron Doors. A large stock of Rolled Steel Joists, Plates, Angles, Tees, and Bar Iron.

Former Price Lists and Quotations withdrawn. Prices are subject to such alterations as may be necessitated by fluctuations in the Market.

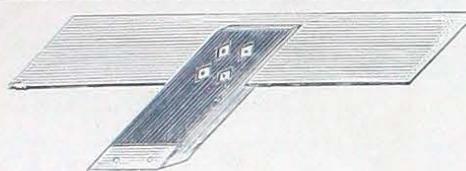
Hours of Business—Saturdays, EIGHT to TWO o'clock; other days, EIGHT to SIX o'clock.
CLOSED ON BANK HOLIDAYS.

BEST WARRANTED JOINERS' TOOLS.



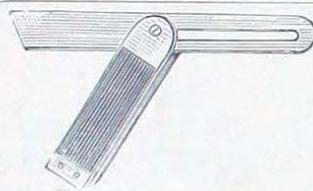
PLATED SQUARES.

N 6180.—Rosewood... 4½ 6 7½ 9 12 15 18 inch.
N 6181.—, best plated 1/2 1/4 1/8 2/— 2/8 3/8 4/6 ..



MITRE SQUARES.

N 6182.—Rosewood, 12 inch 2/3 each.



SLIDING BEVELS.

N 6183.—Ebony, 9 inch 1/11 each.



SCREW BOXES AND TAPS.

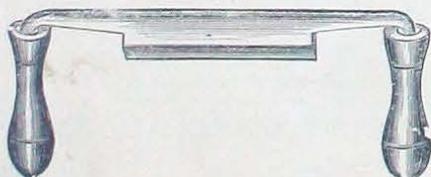
N 6184 ... 3/8 3/8 3/8 4/3 4/9 5/3 each.

SPOKESHAVES, with CAST STEEL IRONS.



N 6185.—Beech ... 1½ 2 2½ 3 3½ 4 inch.
N 6186.—Box ... 1/— 1/— 1/— 1/2 1/4 1/6 ..

CAST STEEL DRAWING KNIVES.

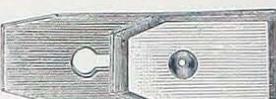


N 6187 ... 6 7 8 9 10 12 inch.
2/- 2/- 2/- 2/2 2/3 2/8 each.



CAST STEEL CUT PLANE IRONS.

N 6188 ... 2 2½ 2½ 2½ inch.
N 6189.—Parallel ... 8½d. 9d. 10d. 1/- 1/2 ..



CAST STEEL DOUBLE PLANE IRONS.

N 6190 ... 2 2½ 2½ 2½ inch.
N 6191.—Parallel ... 1/4 1/5 1/6 1/9 each.
1/8 1/8 1/10 2/2 ..

PLOUGH BITS.
Sizes No. 1 to 8.
N 6192 7d. each.

SQUARE RABBIT IRONS.

N 6193 ... 3d. 7d. 1d. 1½ 1½ inch.
4d. 4d. 4d. 4½d. 5d. each.



SKEW RABBIT IRONS.

N 6194 ... 3d. 7d. 1d. 1½ 1½ inch.
4½d. 4½d. 4½d. 5d. 5½d. each.



SOFT MOULDING IRONS.

N 6195 ... 3d. 1½ 1½ inch.
3d. 3½d. 4d. each.



BLACK CENTRE BITS.

N 6196 ... 3d. 1½ 1½ inch.
4d. 4d. 4½d. 5d. 7d. 8½d. 10½d. each.



FLAT COUNTERSINKS.

N 6197 ... 4d. 5d. 6½d. each.



ROSE COUNTERSINKS.

N 6198 ... 4½d. 4½d. 6d. 8d. each.

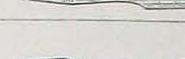
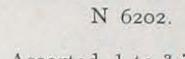


SNAIL COUNTERSINKS.

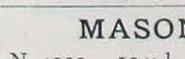
N 6199 ... 4½d. 5½d. each.

TURNSCREWS FOR BRACE.
N 6200 3½d. each.

FORK TURNSCREWS, DITTO.

CAST STEEL TWIST BITS, STRAW COLOUR.
N 6202. ½d. 2½d. 2½d. 2½d. 3d. each.

Assorted, ½ to ¾ inch 2/6 dozen.

SHELL BITS.
N 6203. 1½ 1½ 1½ 1½ 1½ 1½ inch.
4d. 4d. 5d. each.BED BITS.
N 6204. ½ ½ ½ ½ ½ ½ inch.
6½d. 7d. each.NOSE BITS.
N 6205. ½ ½ ½ ½ ½ ½ inch.
4d. 5d. each.SQUARE RHYMERS FOR BRACE.
N 6206 4½d. each.HALF ROUND RHYMERS FOR BRACE.
N 6207 4½d. each.HEXAGON RHYMERS FOR BRACE.
N 6208 6½d. each.SQUARE RHYMERS HANDLED.
N 6209 7d. each.TOOL PADS, BOXWOOD HANDLES.
Containing 10 12 15 tools.
N 6210 ... 1/7 2/1 3/11 each.OCTAGON CHIPPING CHISELS.
N 6211.—7×½ and ½, 8×¾ and ¾, and 9×1½ inch ... 9d. per lb.MASON'S PLUGGING CHISELS.
N 4120.—10×½, 12×¾ inch 1/2 per lb.

The varieties described represent in many cases but a small selection from those that can be supplied. Further details and special prices for large quantities will be sent on receipt of requirements.

BEST WARRANTED JOINERS' TOOLS.

63



SPIRIT LEVELS.

	8	10	12	inch.
N 6213.—Brass plated top	1/-	1/3	1/6	each.
N 6214.—" " best	2/-	2/5	2/8	"
N 6215.—" " plumb	1/6	1/10	2/3	"
N 6216.—" " and level	1/6	1/10	2/3	"
N 6216.—" " plumb and level, with field sight	3/4	4/-	4/8	"

IMPROVED SPIRIT LEVEL.



N 4124.—18 inch	4/-	each.
N 4125.—Ditto, brass tipped top and bottom corners	4/8	"

This level is proved or tested on the top as well as on the base so that it can be used for testing overhead work from the top of the level in places where it is not possible to place the level on its base. Builders, Plasterers, Carpenters, Joiners, Engineers, &c., will find this level of very great service.

MASONS' BEST BOXWOOD RULE PLUMB SPIRIT LEVELS.

N 6217.	6	9	12	inch.
	1/9	2/-	2/6	each.

STEEL POLE KENT AXES.

N 6218.	1 1/2	1 3/4	2	2 1/4 lbs. and above.
N 6218.	1/2	1/-	1/-	1d. 9d. per lb.
N 6219.—Ditto, handled.	1 1/2	2	2 1/2	3
	2/2	2/4	2/8	3/- 3/6 4/- each.

Solid Steel KENT FELLING AXES.

N 4126.—4 lb. to 7 lb.	11d. per lb.
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HOUSE ADZE.

N 6220.	Size Nos.
	2 2/8 3 2/10 each.

SAW SETS.

N 6222.	Beech handle,
	8d. each.

MORRILL'S PERFECT SAW SETS.

N 4127.	3/- each.
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N 6223.—American, 4/- each.

ILLUSTRATIONS.

N 6224.	1/2	1	1 1/2	2 1/2 inch wide.
N 6225.	"	"	1/1	1/5 "
N 6226.	"	"	2/9	"
N 6227.	"	"	2/3	"
N 6228.	"	"	1/-	"
N 6229.	"	"	3/-	"
N 6230.	"	"	4/-	"
N 6231.	"	"	4/-	"

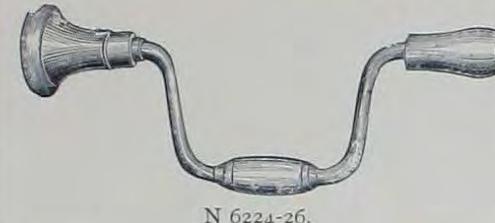
ILLUSTRATIONS.

N 6232.	1/2	1	1 1/2	2 1/2 inch wide.
N 6233.	"	"	1/2	6
N 6234.	"	"	1/2	6
N 6235.	"	"	1/2	6
N 6236.	"	"	1/2	6
N 6237.	"	"	1/2	6
N 6238.	"	"	1/2	6
N 6239.	"	"	1/2	6
N 6240.	"	"	1/2	6
N 6241.	"	"	1/2	6
N 6242.	"	"	1/2	6
N 6243.	"	"	1/2	6

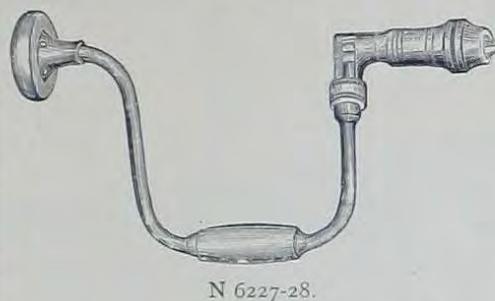
ILLUSTRATIONS.

N 6244.	3/4	5/	6/	100 feet.
N 6245.	5/3	7/6	10/6	"
N 4132.	6/-	8/6	11/6	"
N 4133.	Steel	21/6	27/6	"

BRACES.



N 6224-26.



N 6227-28.



N 4129.

N 6224.—Improved iron, with hard wood head and handle, 8 in. sweep 2/2 each.

10 in. do. 2/6

N 6225.—Ditto, with teak ditto, 10 in. sweep 3/6

N 6226.—Ditto, with rosewood ball bearing head N.P. 10 in. sweep 6/6

N 6227.—Ditto, with ratchet, with beech wood head and handle, 9 inch sweep 4/3

N 6700.—Ditto, ditto, with teak wood head and handle, N.P. 10 in. sweep 6/4

12 inch sweep 7/-

N 6228.—Ditto, ditto, with rosewood head and handle, ball bearing head, N.P., 10 in. sweep 8/-

12 inch sweep 8/9

N 4128.—Lignum vitæ head, rosewood handle with ratchet, ball bearing in head, handle, and nose, N.P.

10 inch sweep, 12/-; 12 inch do., 14/- each.

N 4129.—Rosewood head and handle.

8 inch sweep, 4/6; 10 inch sweep, 5/- each.

Set of Brace Bits unfitted.

Sets of thirty-six.

N 6232.—Black 9/-

N 6233.—Straw colour 12/6

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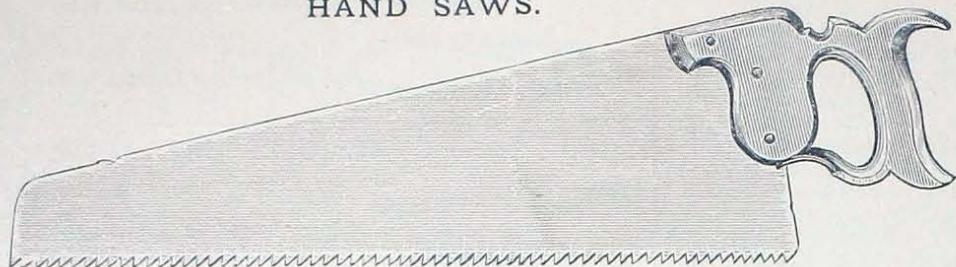
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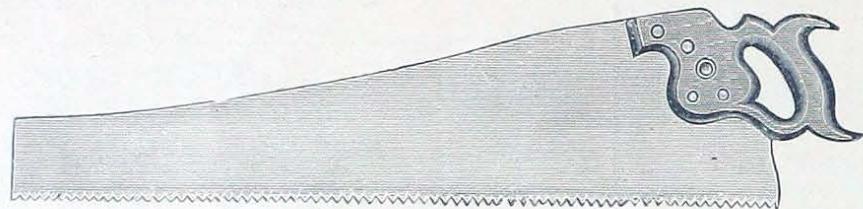
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BEST WARRANTED SAWS.

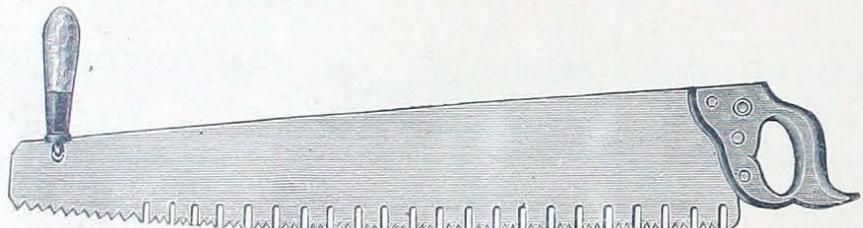
HAND SAWS.



	12	14	20	22	24	26	28	inch.
N 6260.—German steel	1/8	2/1	2/11	3/3	3/8	3/9	—	each.
N 6261.—Cast	—	—	—	—	4/2	4/4	—	“
N 6263.— “ London spring	—	—	—	—	—	5/3	—	“
N 6264.— “ panel	—	—	—	3/9	—	4/4	—	“
N 6266.— “ London spring panel	—	—	—	—	—	5/3	—	“
N 6267.— “ ripping	—	—	—	—	—	4/8	—	“
N 6270.— “ London, spring ripping	—	—	—	—	—	5/8	—	“



N 4140.—Extra cast steel, hand 26 inch	...	...	...	...	4/6	each.
N 4141.— “ “ “ ripping 28	“	“	“	“	4/9	“



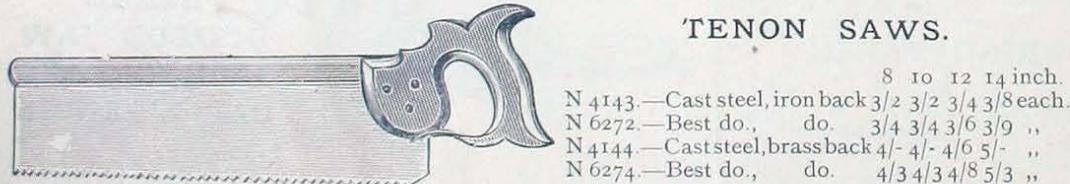
N 4142.—Cast steel, one man, cross cut	...	6/-	6 1/2	8/-	5	feet.
Extra loose adjustable handles, 7d. each.						

CROSS CUT SAWS, GULLETT OR PEG TOOTH.



N 6281.—Cast steel	...	7/6	8 1/2	10 1/6	11 1/2	13/-	each.
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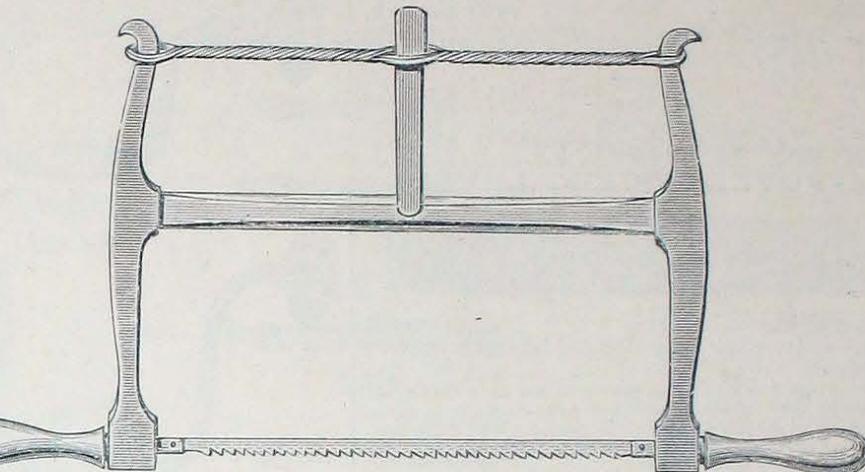
TENON SAWS.



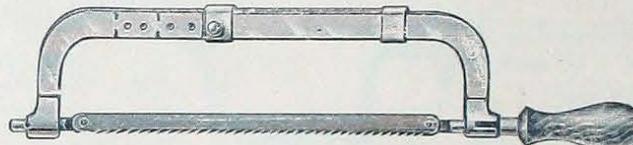
N 4143.—Cast steel, iron back	3/2	3 1/2	3 4/3	3/8	each.
N 6272.—Best do., do.	3/4	3 1/4	3 6/3	9	“
N 4144.—Cast steel, brass back	4/-	4/-	4 5/-	“	
N 6274.—Best do., do.	4/3	4/3	4 8/5	3/3	“

Illustrations are about one-sixth full size. The varieties described represent in many cases but a small selection from those that can be supplied. Further details and special prices for large quantities will be sent on receipt of requirements.

TURNING SAWS AND FRAMES.

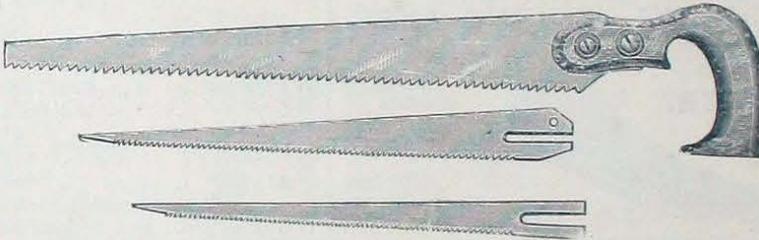


N 6280	...	...	...	10	12	14	16	inch
	3/-	3/4	3/8	4/3	each			

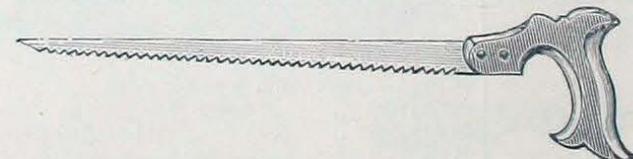


N 4145	...	...	...	6	7	8	9	10	11	12	inch
Blades for ditto	...	...	...	2 1/2 d.	3 d.	3 d.	3 1/2 d.	4 d.	4 1/2 d.	5 d.	each.

INTERCHANGEABLE SAWS.



N 4146.—Consisting of one handle, and one each compass, pruning and key hole blades	2/9	per set.
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COMPASS OR LOCK SAWS.

N 6276.—Cast steel.	10	12	14	16	18	20	inch.
	1/2	1/3	1/4	1/5	1/6	1/8	each.



N 6174.—Beechwood	11 1/2 d.	each.
N 6175.—Ebony	1/6	“



KEYHOLE SAWS.

N 6277.—Cast steel, assorted to 12 inch	3d.	each.
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IRON AND WOOD PLANES AND SPOKESHAVES.



N 4156.—Iron Bull Nose Rebate Plane, 1 inch, 1/2 each.



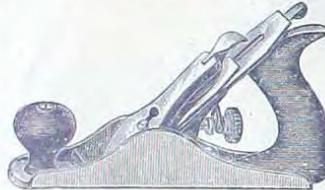
N 4157.—Iron Block Plane, adjustable, 1 1/4 inch, 1/3 each.

N 4158.—Ditto, without adjustment, 10d. each.

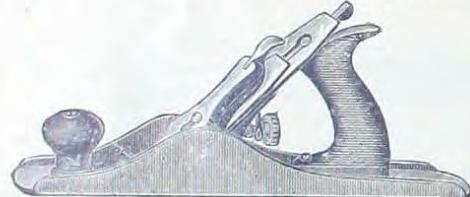


N 4159.—Iron Block Plane, adjustable, 1 1/4 inch, 1/10 each.

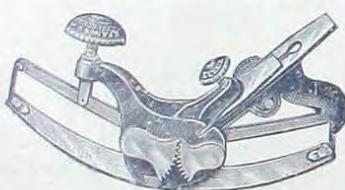
N 4160.—Ditto, without adjustment, 1/3 each.



N 4161.—Iron Smoothing Plane, 2 inch, 6/9 each. 2 3/8 " 7/9 "



N 4162.—Iron Jack Plane, 14 x 2 inch, 8/- each. N 4163.—Ditto Trying do., 22 x 2 3/8 inch, 11/6 ..

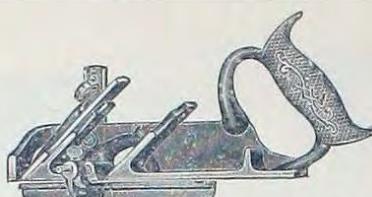


N 4164.—Flexible Steel Plane, adjustable for circular, hollow or smooth at any sweep, 8/3 each.



N 4165.—Iron Shoulder Plane, with patent adjustment, 8 x 1 1/2 inch, 13/- each.

N 4166.—Ditto, without adjustment, 10/9 each.



N 4167.—Iron Duplex Rebate Plane and Fillister, 8 1/2 x 1 1/2 inch, 4/9 each.

By removing the arm to which the fence is secured, a Handled Rebate Plane is had, and with two seats for the cutter, so that the tool can be used as a Bull Nose Rebate if required.

The arm to which the fence is secured can be screwed into either side of the stock, thus making a superior right or left hand Fillister with adjustable spur and depth gauge.



N 4168.—Iron Smoothing Plane, walnut, fitted with C.S. parallel iron.

2 1/2 to 2 1/4 inch. 12/9 13/9 15/- each.



N 4169.—London pattern iron Smoothing Plane, rosewood fitted, 2 1/2 inch, 24/3 each.

N 4170.—Ditto, ditto, gun metal ditto, ebony fitted, 2 1/2 inch, 26/9 each.

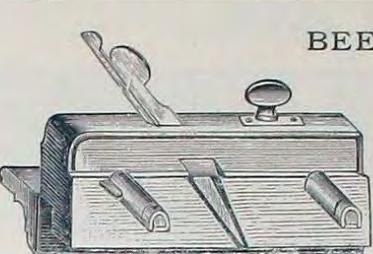
N 4171.—Iron, without handle, 2 1/2 inch, 21/6 each. N 4172.—Gun metal, ditto, 24/3 each.



N 4173.—Iron Spokeshave, double iron, raised handle, 10 x 2 1/2 inch, 9 1/2 d. each.



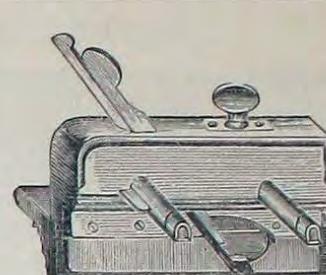
N 4174.—Iron Spokeshave, double iron, hollow face, 10 x 2 1/2 inch, 8d. each.



N 6299.—Sash Fillister, double hooped 14/- each.

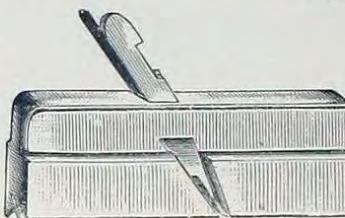
N 6300.—" " left hand, wedge tooth, and shoulder boxed 17/- ..

N 6301.—Moving Fillister, shoulder boxed and slip top 8/- ..

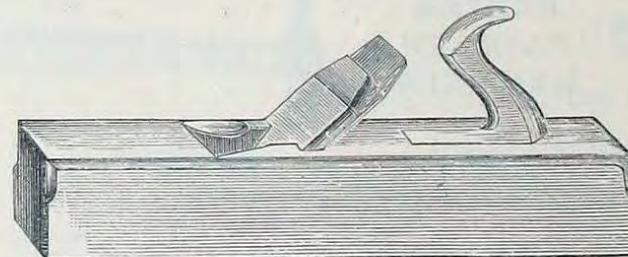


N 6296.—Plough, with eight best bits, double brass hooped, best brass stop 20/- each.

N 6297.—Ditto, " ditto, " ditto, improved stop, skate end 22/6 ..



N 6294.—Bead 1/8 to 5/8 3/11 3/2 1 inch. 2/8 3/5 each.



N 6302.—Jack, with double iron, 17 x 2 1/4 inch, 5/3 each.



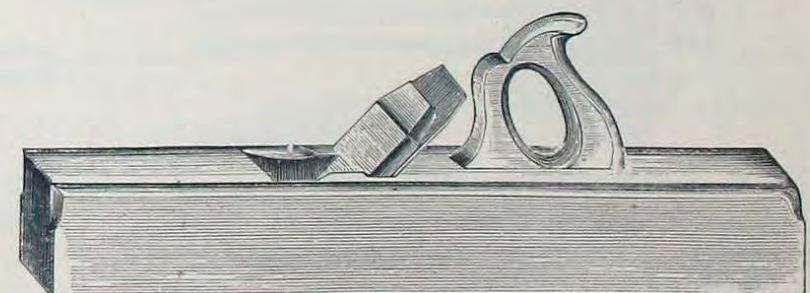
N 6306. each. Iron Chariot, 1 1/8 in., 7/6

N 6307. Gun-metal, ditto, 8/6



N 6304. Iron Bull Nose, 1 in., 5/9 1 1/2 in., 7/- each.

N 6305. Gun metal, do. 1 in., 7/6; 1 1/4 in., 8/6 each.



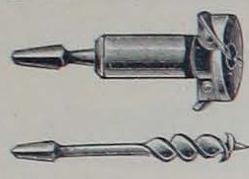
N 6303.—Trying, with double iron, 22 x 2 1/2 inch, 6/9 each.

Prices of Planes are for the best quality; a cheaper make can be supplied.

Illustrations are about one-sixth full size. The varieties described represent in many cases but a small selection from those that can be supplied. Further details and special prices for large quantities will be sent on receipt of requirements.

SUNDRY TOOLS.

67



IMPROVED HOLLOW
AUGER.

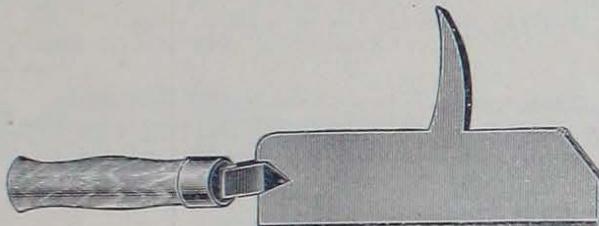
N 4180 $\frac{5}{8}$ $\frac{3}{4}$ $\frac{7}{8}$ 1 $1\frac{1}{8}$ $1\frac{1}{4}$ inch.
4/8 4/8 5/4 5/4 6/8 6/8 each.
(Including bits).



IMPROVED SPOKE
TRIMMER.

N 4181 2/9 each.

SLATER'S AXE.



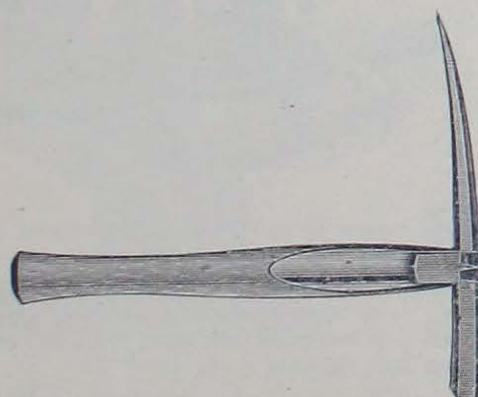
N 4182.—9 inch 3/- each.

SLATER'S RIPPER.



N 4183.—24 inch 2/10 each.
30 " 3/8 "

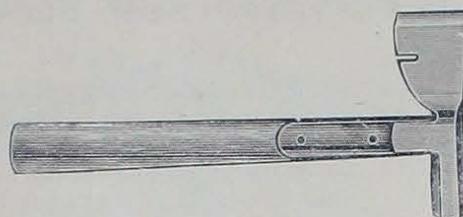
SLATER'S HAMMER WITH CLAW.



N 4184 2/- each.

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LATH HAMMER.



N 4185 1/2 1/4 1/6 1/9 each.

CAST STEEL BRICK HAMMER.



N 4186 1/9 each.
If with Wood Handle ... 2/- each.

CAST STEEL STONE
MASON'S HAND HAMMER.



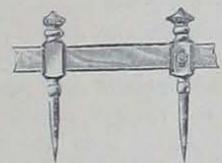
N 4187.—3, 3½, 4 lb. ... 6d. per lb.

CAST STEEL MASON'S
WALL HAMMER.



N 4188.—3, 3½, 4 lb. ... 6d. per lb.

BRASS TRAMMEL HEAD
WITH PENCIL HOLDER.



N 4189 $\frac{9}{16} \times \frac{1}{4}$ $\frac{11}{16} \times \frac{5}{16}$ $\frac{13}{16} \times \frac{7}{16}$ inch.
1/10 2/2 2/10 each.

LETTERS & FIGURES FOR
GENERAL PURPOSES.

N 4190 LETTERS.

Per set of 27

1/8 in. ...	4/4	1/8 in. ...	1/6
1/6 in. ...	6/3	1/6 in. ...	2/9
1/4 in. ...	7/10	1/4 in. ...	3/3
5/16 in. ...	11/9	5/16 in. ...	4/4
3/8 in. ...	15/7	3/8 in. ...	5/9
1/2 in. ...	17/6	1/2 in. ...	7/9

Steel included.

N 4191 FIGURES.

Per set of 9.

1/8 in. ...	1/6	Per Letter.	Per Letter.
1/6 in. ...	1/3	1/6 in. ...	1/3
1/4 in. ...	2/9	1/4 in. ...	2/9
5/16 in. ...	3/3	5/16 in. ...	6d.
3/8 in. ...	4/4	3/8 in. ...	7½d.
1/2 in. ...	5/9	1/2 in. ...	7½d.
1/8 in. ...	7/9	1/8 in. ...	Stocks or Steel and Forgings charged extra.

CAST STEEL STAMPS FOR
JOINERS, ENGINEERS,
TINMEN AND OTHERS.

N 4192.

Per Letter.

3 in. ...	1/-	1½ in. ...	3/3
2½ in. ...	1/3	1½ in. ...	3/6
2 in. ...	1/6	1½ in. ...	4/-
1½ in. ...	1/9	1½ in. ...	4/6
1 in. ...	2/-	1½ in. ...	5/-
1/2 in. ...	2/6	1½ in. ...	5/6
1/8 in. ...	3/-	2 in. ...	6/-

BRASS PLUMB BOB.

1	2	3
3½	4½	6 oz.
1/2	1/2	1/4 each.

LEAD PLUMB BOB.

N 4195.—1 lb.	8d. each.
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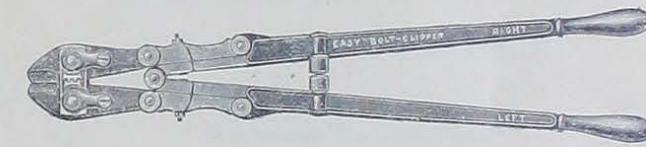
BENCH OIL CAN, BRASS
BOTTOM.

N 4196	5d. each.
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ENGINEERS'
OIL CAN WITH
COPPER
SPOUT.

N 4197	rod.	1/2	1/3	1/6	1½ pint.
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THE "EASY" BOLT CLIPPER.



For ...	0	1/5	1/8	2	3	5
N 4198	1/4	1/8	25/-	32/-	each.	

TOOL BASKET.

Canvas lined, with Pocket.

27 30 33 36 inch.

N 4199 10d. 1/1 1/4 1/7 each.

Extra strong do.

27 30 33 inch.

N 4200 1/6 1/9 2/- each.



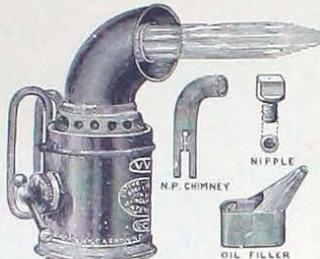
BURN BRANDS, NAMES
AND INITIALS, BEST
WROUGHT IRON, WITH A
LONG HANDLE TO EACH.

N 4193.

Per Letter.	Per Letter.
3 in. ...	1/-
2½ in. ...	1/3
2 in. ...	1/6
1½ in. ...	1/9
1 in. ...	2/-
1/2 in. ...	2/6
1/8 in. ...	3/-
2 in. ...	2 in. ...

BLOW PIPES AND LAMPS.

PAQUELIN PAINT REMOVING AND PLUMBER'S LAMP.



N 4206.

Can be used in any position. Gives 1800 degrees of heat. Cost to work, 1d. for four hours. It only weighs 20 ozs. Use Benzoline only.

No. 1.—Burns 1 hour 10/- each.
" 2. " 2 hours 13/- "

If with Flame Regulator, 2/- each extra.

Extra Nipples, 6d. each. Chimneys, 2/6 each.

Oil Fillers, fitted with Strainer, No. 1, 10d.; No. 2, 1/6 each

ORDINARY BLOW PIPE.



N 4207.

8 9 10 inch.
6d. 6½d. 7d. each.

SPIRIT BLOW PIPE.



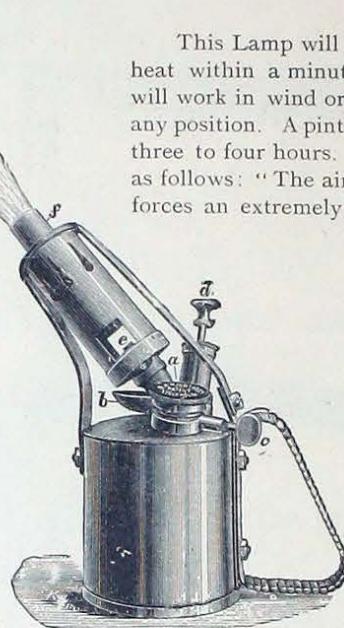
N 4208.—5/- each complete.

This novel and useful article is extremely light and portable. The bottom part contains a supply of Naphtha or Methylated Spirit which soaks into a wick of cotton; the top of this wick projects and is ignited at the upper end.

THE "ÆTNA" PETROLEUM BLOW-LAMP.

N 3088.

This Lamp will bring a copper rod to welding heat within a minute, is perfectly weather-proof, will work in wind or rain, burns well and safely in any position. A pint of ordinary petroleum will last three to four hours. The principle of the Lamp is as follows: "The air, being pumped into the tank, forces an extremely fine jet of Petroleum to percolate the combustion tubes, igniting only in the form of gas on reaching the open mouthpiece. The gas cannot get into the oil-tank, explosion is therefore impossible." It is most useful for wiping on bottoms of cisterns, &c., and large joints in awkward places, and for joining Electric wires, brazing Keys, &c.



No. 1, Brass, to contain 2 pints 15/- each.

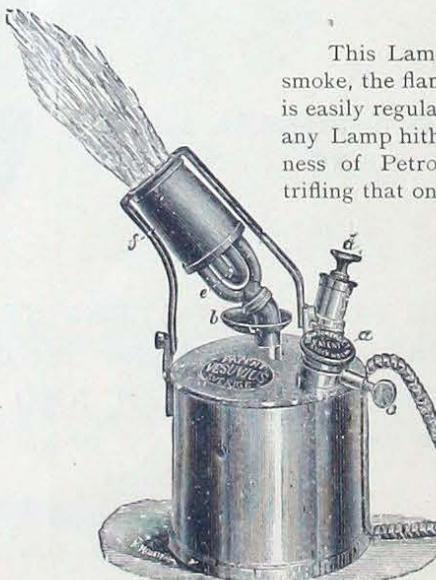
No. 2, Brass, to contain 1 pint, 13/- each.

The "Ætna" produces a hotter flame than any other Brazing Lamp hitherto invented.

THE "VESUVIUS" PETROLEUM LAMP, FOR PAINTERS, Etc.

N 3090.

This Lamp is perfectly free from smell, soot and smoke, the flame is proof against draught or wind, and is easily regulated. In practice is less expensive than any Lamp hitherto known on account of the cheapness of Petroleum, and its consumption being so trifling that only one-third of a pint is used per hour under the hardest pressure. It burns without a wick, the burner heating the Petroleum by its own flame and converting it into Gas. Explosion is impossible, because gas cannot possibly get into the tank, the latter containing only oil in liquid form, and the air that is pumped into it.

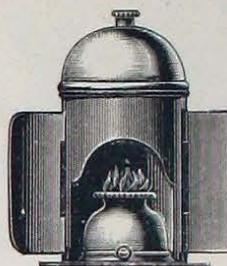


Gas is only developed in the Burner.

Every Lamp is tested under 45 lbs. pressure per square inch.

No. 1, Brass, to contain 2 pints 15/- each.
" 2, " " 1 pint 13/- "

ORDINARY PAINT-REMOVING LAMP, FOR METHYLATED SPIRITS.



N 4209.

No. 3. 5/-

No. 4. 6/- each.

N 4210.—Soldering Lamps, without wings—

No. 1. No. 2. 3/- 3/6

No. 3. 4/6 each.

APPROXIMATE TIME OF BURNING:

No. 1. No. 2. $\frac{3}{4}$ I

No. 3. $1\frac{1}{4}$ hours.

THE "HEKLA" PORTABLE FURNACE.



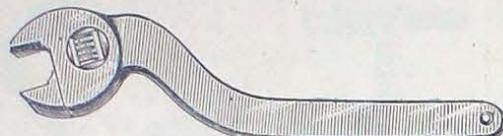
N 3092.

This Furnace burns Petroleum Oil without wick, and is a very useful tool. Is free from smell, soot or smoke, economical in use, and has the advantage of being very portable. Is suitable for melting metals, heating soldering irons, bending iron pipes, tempering tools, &c., often taking the place of a Portable Forge.

No. 1.	No. 2.	No. 3.
One Burner,	Two Burners,	Three Burners.
34/-	37/-	45/-

ENGINEERS' TOOLS.

CLYBURN SPANNER.



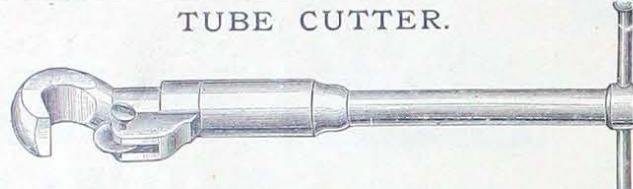
To span	10	12	15	18	21	24	inch.
	1	1 1/4	1 1/2	1 3/4	2	2 1/4	"
	5/-	6/4	7/9	9/6	11/-	14/-	each.

WEDGE SPANNER.



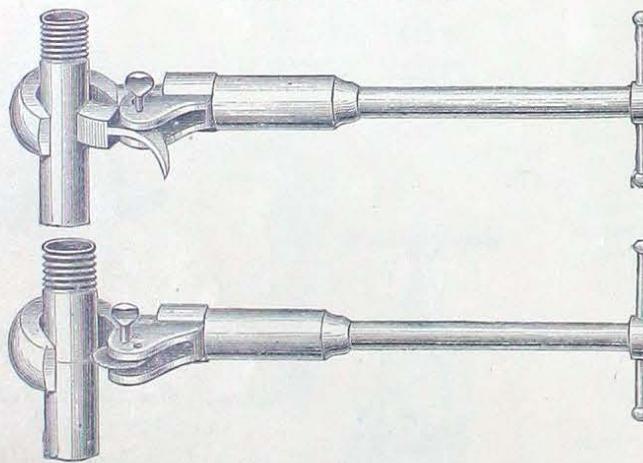
12	15	18	24	inch.
1/2	1/6	2/6	5/6	each.

TUBE CUTTER.



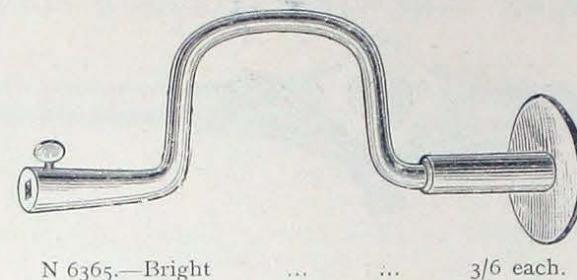
N 6361.	Size No. 1. To cut $\frac{1}{2}$ to 1 inch. 9/-	No. 2. $\frac{1}{4}$ to 2 inch. 12/6 each.
N 6362.	3-wheel 11/6	1 to 2 inch. 17/6 ..

COMBINED PIPE WRENCH AND TUBE CUTTER.



N 6363.	Size No. 1. To cut $\frac{1}{2}$ to 1 inch. 10/-	No. 2. $\frac{1}{4}$ to 2 inch. 16/- each.
N 6364.	EXTRA WHEELS FOR TUBE CUTTERS. For Size No. 1. 8d.	No. 2. 10d. No. 3. 1/3 each.

FITTERS' IRON BRACE.



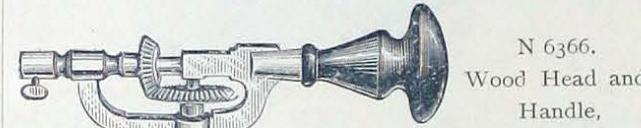
N 6365.—Bright 3/6 each.

ARCHIMEDEAN DRILL, complete with Bits.

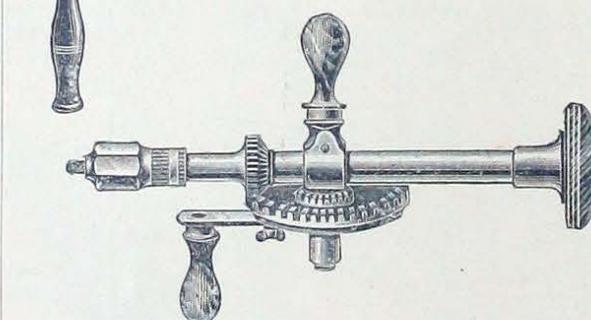


N 4221. 6 8 10 12 inch.
1/3 1/6 1/9 2/- each.

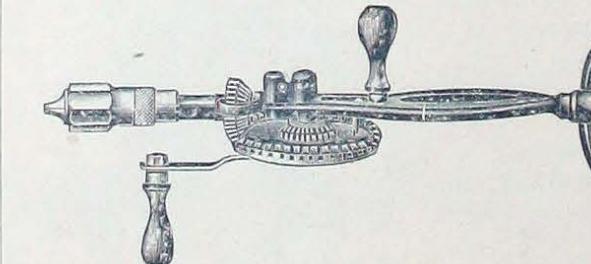
BREAST DRILLS.



N 6366.
Wood Head and
Handle,
without Drills,
6/- each.



N 4222.—Patent 2-speed, with ball bearing, Wood Head
and Handle, 2 pair Jaws, and 6 Drills ... 11/- each.
N 4223.—Do. do., Nickel-plated ... 12/9 ..



N 4224.—2-speed, with Wood Handles, and Ball Bearings,
2 pair Jaws, without Drills ... 10/- each.

GAS PLYERS.



N 6368.—2-hole	...	...	...	6	8	10	12 inch.
N 6369.—3-hole	...	...	...	1 1/2 d.	1/5	2/1	2/10 3/7 "
N 6370.—Burner Plier, 2-hole, with Wire Cutter,	...	...	...	—	2/1	6	9 inch.
Turnscrew and Tomkin	...	...	...	1/9	2/10	each.	
N 6371.—Ditto, with Flat Nose, Wire Cutters, and Turnscrew	...	...	...	5 1/2	inch,	1 1/2 d.	each.

GAS TONGS.



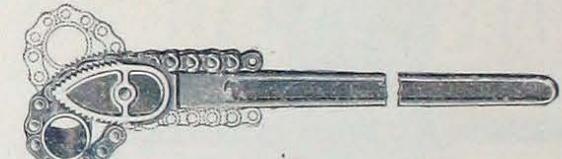
N 6372.—To take $\frac{1}{2}$ 2/2 1 1/2 3/4 1 1/2 2 inch.
1/9 5/9 7/9 3/8 4/6 each.

PIPE WRENCH.



N 6373.
Size ... No. 1 2 3 4 6
To take $\frac{1}{2}$ to $\frac{1}{2}$ inch. $\frac{1}{2}$ to 1 $\frac{1}{4}$ inch. 1 to 2 inch. 1 $\frac{1}{2}$ to 3 inch.
3/- 4/3 5/9 7/9 14/6 each.

CHAIN PIPE WRENCH.

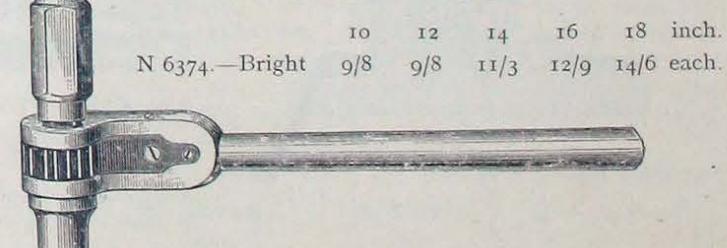


N 4266. No. 0 1 2 3 4 5
To take $\frac{1}{2}$ to $\frac{3}{4}$. $\frac{1}{2}$ to 1 $\frac{1}{2}$. $\frac{1}{2}$ to 2 $\frac{1}{2}$. $\frac{3}{4}$ to 4. 1 $\frac{1}{2}$ to 8. 2 to 12 inch.
8/6 11/6 18/6 25/6 37/- 60/- each.

MACHINE-MADE PIPE WRENCH OR TONGS.

N 4227. To take $\frac{1}{2}$ to $\frac{5}{4}$. $\frac{1}{2}$ to 2 $\frac{1}{2}$. $\frac{1}{2}$ to 3. $\frac{1}{2}$ to 3 $\frac{3}{4}$ inch.
11d. 2/3 3/8 6/8 each.

RATCHET BRACE.



N 6374.—Bright 10 12 14 16 18 inch.
9/8 9/8 11/3 12/9 14/6 each.

FILES AND RASPS.

NET PRICES.

71

FLAT, HALF ROUND, SQUARE and ROUND FILES, FLAT AND HALF ROUND RASPS & FLOATS.

Rough and bastard.

To 4 inch	... 2/10 dozen.
5 "	... 3/6 "
6 "	... 4/3 "
7 "	... 4/8 "
8 "	... 5/9 "
10 "	... 8/3 "
12 "	... 11/10 "
14 "	... 16/6 "
15 "	... 19/10 "
16 "	... 23/9 "
18 "	... 33/- "

SECOND CUT HALF-ROUND RASPS.

5 inch	... 4/2 dozen.
6 "	... 5/- "
7 "	... 5/4 "
8 "	... 6/8 "
10 "	... 9/4 "
12 "	... 13/2 "
14 "	... 18/3 "
15 "	... 21/6 "
16 "	... 26/- "

MIDDLE CUT FLAT FLOATS.

6 inch	... 4/3 dozen.
9 "	... 6/8 "
12 "	... 12/- "
18/3 "	... 18/3 "
21/6 "	... 21/6 "

SMOOTH AND CABINET FILES AND RASPS.

To 4 inch	... 4/2 dozen.
5 "	... 5/- "
6 "	... 5/9 "
7 "	... 6/4 "
8 "	... 7/6 "
10 "	... 10/6 "
12 "	... 14/8 "
14 "	... 19/10 "
16 "	... 28/8 "

HAND SMOOTH FILES.

4 inch	... 4/6 dozen.
5 "	... 5/6 "
6 "	... 7/- "
7 "	... 7/6 "
8 "	... 8/6 "
10 "	... 12/8 "
12 "	... 16/6 "
14 "	... 23/3 "

HAND, ROUGH AND
BASTARD; ALSO
3-SQUARE BASTARD.

To 4 inch	... 3/3 dozen.
5 "	... 3/9 "
6 "	... 5/2 "
7 "	... 5/9 "
8 "	... 6/8 "
10 "	... 10/- "
12 "	... 13/9 "
14 "	... 19/10 "
15 "	... 23/9 "
16 "	... 27/6 "

HORSE RASPS.

Machine cut.

$\frac{1}{2}$ or $\frac{1}{2}$ File.

14 inch	... 15/6 dozen.
15 "	... 19/- "
16 "	... 22/6 "
Single bevelled, 1/1 dozen extra.	

Double ... 2/1 " "

MASON'S RASPS.

10 x 1 x $\frac{1}{4}$ inch	... 7/- dozen.
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BREAD RASPS.

20/8 dozen.

MILL SAW FILES.

Single Cut
With 2 round edges.

TAPER SAW FILES.

Single Cut.
3 $\frac{1}{2}$ inch ... 2/5 dozen.

TAPER or blunt.

3 inch	... 2/9 dozen.
3 $\frac{1}{2}$ "	... 3/- "
4 "	... 3/6 "
4 $\frac{1}{2}$ "	... 3/10 "
5 "	... 4/6 "

STUBS' SAW FILES.

Frame.		Gulletting.
3 inch	... 3/6 dozen.	4 inch ... 4/3 dozen.
3 $\frac{1}{2}$ "	... 3/6 "	4 $\frac{1}{2}$ " ... 4/9 "
4 "	... 3/6 "	5 " ... 5/3 "
4 $\frac{1}{2}$ "	... 4/- "	5 $\frac{1}{2}$ " ... 5/9 "
5 "	... 4/6 "	6 " ... 6/3 "
5 $\frac{1}{2}$ "	... 5/- "	7 " ... 7/9 "

REAPER FILES.

Double cut and plain, bevelled edge, knife shape, tanged or self handle.
5 $\frac{1}{2}$ " ... 4/- "

6 " ... 4/6 "

6 " ... 5/6 "

7 " ... 5/9 "

7 " ... 7/- "

8 " ... 10/- "

9 " ... 12/- "

9 " ... 14/- "

WARDING FILES.

Assorted, 3/5 dozen.

If ordered in less quantity than $\frac{1}{2}$ dozen of a size 10 per cent. extra will be charged.

DRILLING MACHINES.

The Machines shown in the following Illustrations are introduced to supply a long-felt want for a cheap and strong Machine suitable for Smiths, Country Ironmongers, &c. Each Machine is fixed to a strong plank, and in cases where out-door work is undertaken, the Machine can be taken to the job and fixed or tied to the nearest wall or post. All Machines are fitted with self-acting Feed, which can be regulated according to the metal or other work to be drilled.

THE CHAMPION
SELF-FEED BLACKSMITH
POST DRILL.



T 4246.

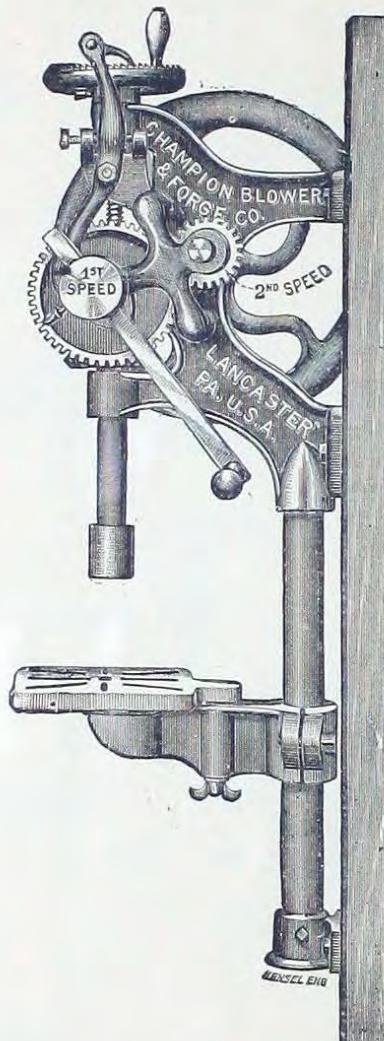
With Square Table.

Has one speed. Will drill a hole to 1 inch. Drills to the centre of $14\frac{1}{2}$ -inch circle. Has Spindle $1\frac{1}{8}$ -inch in diameter. Is bored to take in $\frac{1}{2}$ -inch straight shank drills.

Weight, 100 lbs.

For hand	...	...	...	£1 17 6
For power	...	...	...	2 7 6

THE WORLD'S CHAMPION
SELF-FEED BLACKSMITH
POST DRILL.



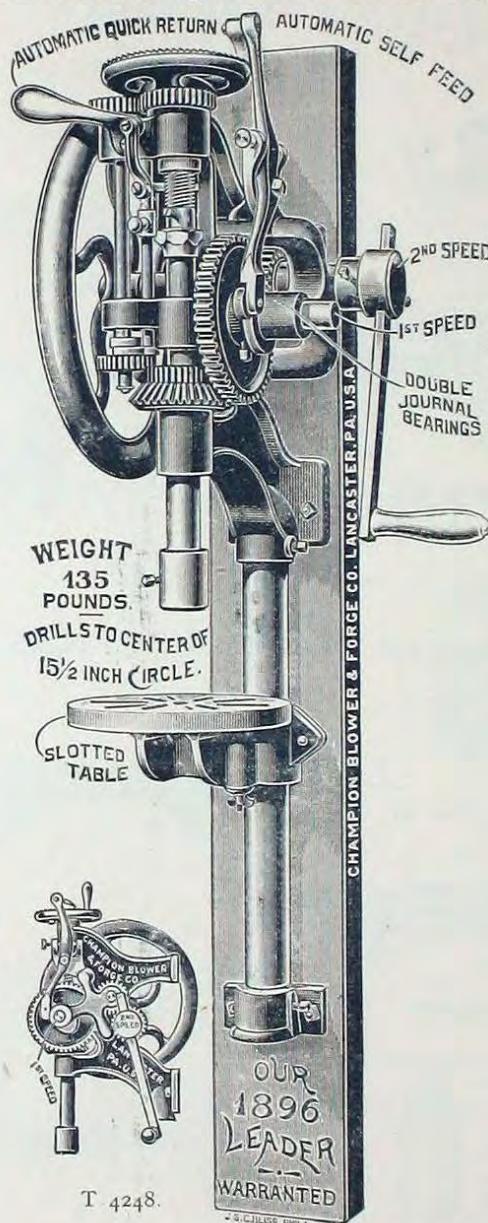
T 4247.

Has two speeds. Will drill a hole to $1\frac{1}{4}$ inch. Drills to the centre of 15-inch circle. Has Spindle $1\frac{1}{8}$ -inch in diameter. Is bored to take in $\frac{1}{2}$ -inch straight shank drills.

Weight, 125 lbs.

For hand	...	...	...	£2 5 0
For power	...	...	...	2 15 0

THE CHAMPION
QUICK-RETURN BLACKSMITH
SELF-FEED POST DRILL.
With Automatic Quick-Return and Self-Feed.

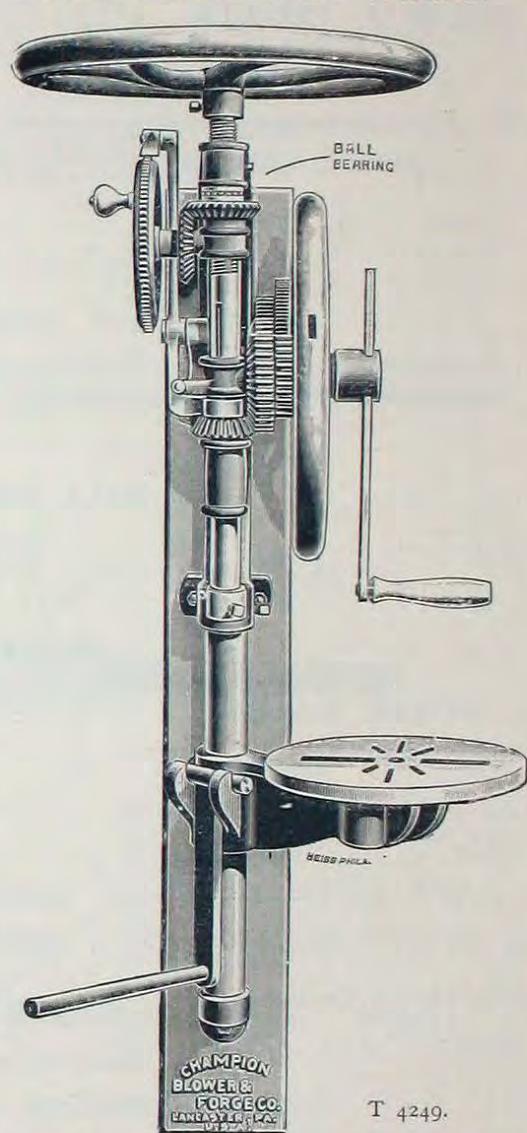


T 4248.

Has two speeds. Will drill a hole to $1\frac{1}{4}$ inch. Drills to the centre of $15\frac{1}{2}$ -inch circle. All bearings are ground to a working fit out of the solid metal. Spindle bored to take in $\frac{1}{2}$ -inch straight shank drills.

For hand	...	...	...	£2 16 0
For power	...	...	...	3 6 0

THE CHAMPION NEW
BALL-BEARING BLACK
DIAMOND BLACKSMITH
SELF-FEED POST DRILL.



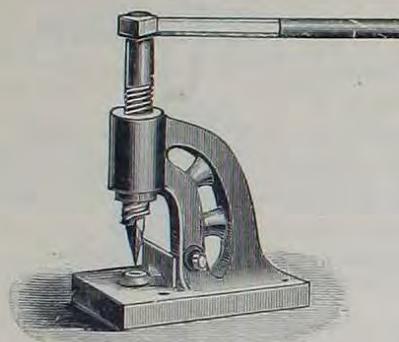
T 4249.

The Wheel Holder which is intended to hold and turn wheels on for drilling tire and preventing damage to painted wheels.

The second speed, for heavy drilling, is very convenient and is changed in an instant, simply a change of the crank handle into the side fly wheel. It will drill to the centre of an 18-inch circle. Spindle bored to take in $\frac{1}{2}$ -inch shank drills. Will drill a hole to $1\frac{1}{4}$ inch. Weight 215 lbs.

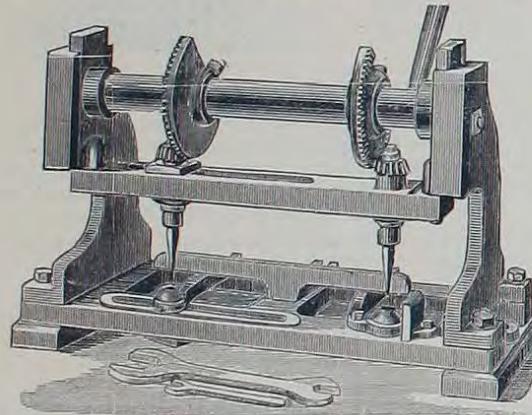
For hand	...	...	...	£4 12 0
For power	...	...	...	5 6 0

SINGLE SLATE HOLING MACHINE.



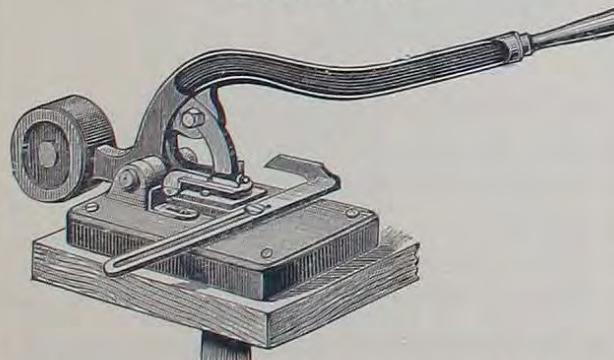
N 4236. ... £1 7 6 each.

DOUBLE SLATE HOLING MACHINE.



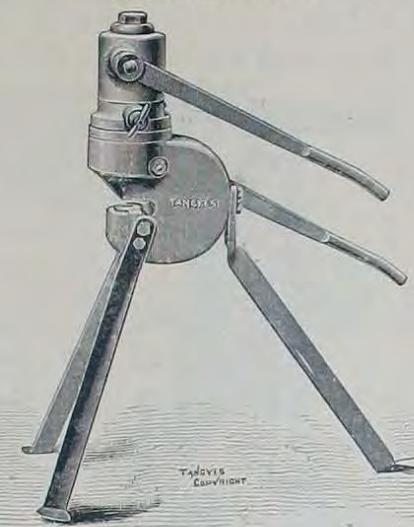
N 4237. ... £6 6 0 each.

VENETIAN BLIND PUNCHING MACHINE.



N 4238.—Will punch hole $1 \times \frac{3}{8}$ inch ... £1 15 0 each.

HYDRAULIC PUNCHING BEAR.



T 4239.

Open mouth, wrought iron body mounted on three wrought iron legs, steel ram, cistern with wrought iron bottom, gunmetal pump and wrought iron plunger, wrought iron hand levers with one stamped steel pump wrench and one round steel punch and die.

If Nos. 2 and 2A are to be used with punches and dies smaller than $\frac{9}{16}$ in., or Nos. 3 and 4 with smaller than $\frac{11}{16}$ in., holders will be required at 5/- per pair. Bears are not supplied to punch holes of a diameter smaller than the thickness of the plate to be punched, because of the excessive strain on the punch. Instructions for using these bears are given in application.

Size No.	1	1A	2	2A	3	4
*To punch holes, diameter	ins.	$\frac{3}{4}$	$1\frac{3}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$
*Through iron plates, thick	"	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	$1\frac{1}{8}$
From back of gap to centre of punch	"	$1\frac{3}{4}$	$1\frac{1}{4}$	2	2	$2\frac{1}{2}$
Approx. weight	lbs.	79	102	130	206	360
Prices	"	150/-	164/-	196/-	296/-	420/-
						650/-

* These are given, as stated, for IRON PLATES. If it is required to punch similar holes through plates of harder material, a larger size bear must be used.

STEEL PUNCHES AND DIES.

To punch holes	ins.	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$1\frac{3}{8}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$
Through iron plates, thick	"	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{8}$
Round	Price per pair.	4/-	5/-	5/6	6/-	6/6	7/-	8/-	10/-
Oval	"	8/-	10/-	11/-	12/-	13/-	14/-	16/-	20/-
Square	"	8/-	10/-	11/-	12/-	13/-	14/-	16/-	20/-

A pair means one punch and one die. Intermediate sizes are charged at the price of the next larger size.

WHEEL PLATE, Flat or Dished.

Made to any size or bevel required. Weights of some useful sizes of dished

5 ft. diameter, 16 in. hole, 1 in. thick, about 6 cwt. 0 qrs. 14 lbs.

5 ft. " 16 in. " 1 $\frac{1}{4}$ in. " outside 6 " 2 " 0 "

5 ft. 6 in. do. 16 in. " \times 3 in. " inside 6 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

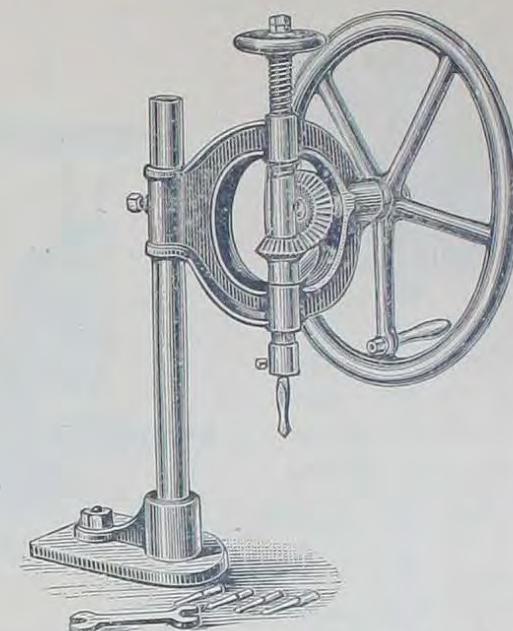
5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "

5 ft. 6 in. do. 16 in. " 8 " 2 " 0 "



73

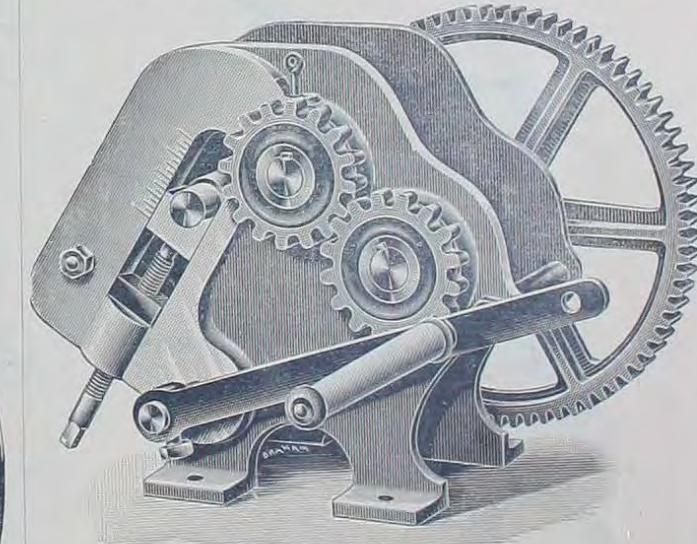
RADIAL PILLAR DRILLING MACHINE.



N 6367. ... £1 15 6 each.

Height, 1 foot 6 inches; drills holes up to $\frac{1}{2}$ inch diameter, and in centre of 9 inches; depth of feed, $2\frac{1}{2}$ inches.

TYRE BENDING MACHINE.



N 6510.

B size.—Rollers 6 ins. wide, will bend cold iron any size up to $5 \times \frac{3}{4}$ in. ... £4 4 0

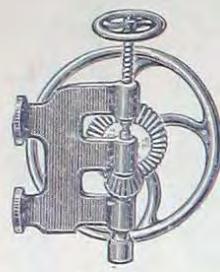
C size.—Rollers 8 ins. wide, will bend cold iron any size up to $6 \times \frac{7}{8}$ in. ... £7 7 0

These are specially constructed for heavy work. By simply removing one inch-pin the top roller can be removed, allowing the tyre to be taken from or re-placed in the machine without difficulty.

The moveable roller is adjusted correctly by means of the scale which is attached to the bearings, as shown to the left hand side of the illustration.

The varieties described represent in many cases but a small selection from those that can be supplied. Further details will be sent on receipt of requirements.

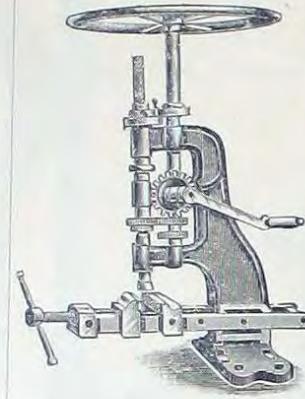
DRILLING MACHINES, FORGES AND BELLOWS.



N 6390.

Wall Drilling Machine, single speed, hand feed motion.
Fly wheel 23½ in. diameter.
Drills up to ½ in. diameter.
Distance from centre of spindle to wall 8 in.

Price £2 0 0



N 3030.

Bench Drilling Machine, double geared, sliding parallel vice, with steel jaws, to fit frame at two different heights, self feeding motion.

Diameter of spindle 1 in.

Diameter of fly wheel 2 ft. 4 in.

Drills up to 1 in. diameter.

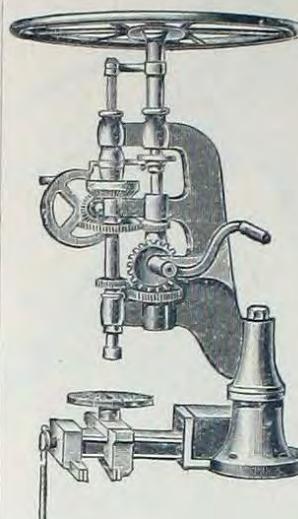
Height 3 ft. 3 in. to top of wheel.

Gap from centre of Drill 7½ in.

Approximate weight 1½ cwt.

Price £4 18 6

DRILLING MACHINES.



N 4244.

Bench Drilling Machine, double geared, reversible sliding parallel vice with steel jaws and table, to fit frame at two different heights, self acting feed motion, with fly wheel for quick raising and lowering spindle. The top of machine can be swung round by loosening nut on top of pillar.

Diameter of spindle 1½ in.

Diameter of fly wheel 2 ft. 7½ in.

Drills up to 1 in. diameter.

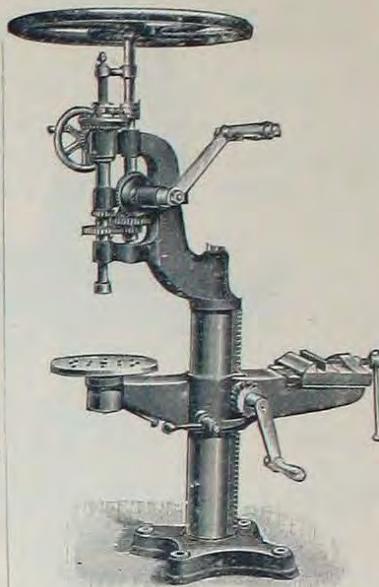
Diameter of face plate 11½ in.

Height 3 ft. 10 in. to top of wheel.

Gap to centre of drill 12¾ in.

Approximate weight 2½ cwt.

Price £6 14 6



N 6393.

Pillar Drilling Machine, double geared, self-acting feed motion, revolving table, having on one end a circular adjustable plate and parallel vice on the other. The top part of machine can be swung round by loosening the nut on top of pillar. Raising motion of the table by rack.

Drills up to 1 in. diameter. Diameter of face plate 12½ in.
Height 5 ft. 7 in. Gap to centre 12½ in.

Approximate weight 3½ cwt.

Price for hand power £9 12 6
Ditto, with fast and loose pulleys ... 10 2 0

Also made in larger sizes.

IMPROVED PORTABLE FORGE.

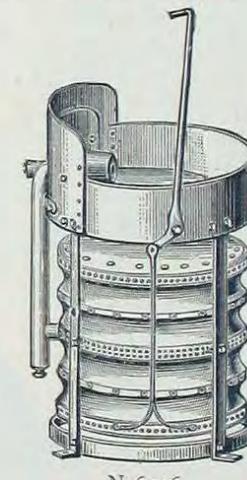


N 6595.

Size No. 1, 2 ft. 5 in. long, 2 ft. wide, 2 ft.
10 in. high, 24 in. bellows ... £4 6 0
Ditto, mounted on wheels as per drawing 5 11 6
Size No. 2, 2 ft. 2 in. long, 1 ft. 10 in. wide,
2 ft. 7 in. high, 22 in. bellows ... 3 19 6
Ditto, mounted on wheels ... 5 5 0
Size No. 3, 2 ft. 2 in. long, 1 ft. 8 in. wide,
2 ft. 6 in. high, 20 in. bellows ... 3 9 0
Ditto, mounted on wheels ... 4 15 0

Above, if with vice attached, 22/- each extra.
2 ft. long, 1 ft. 6 in. wide, 2 ft. 6 in. high,
18 in. bellows ... 3 1 0

IMPROVED SINGLE-BLAST RIVET FORGE.



N 6396.

1 ft. 6 in. wide, 2 ft. 4 in.
high, 16 in. bellows £2 10 0
*1 ft. 8 in. wide, 2 ft. 4 in.
high, 18 in. bellows 2 12 6
*1 ft. 10 in. wide, 2 ft. 4 in.
high, 20 in. bellows 2 19 6
*2 ft. wide, 2 ft. 10 in.
high, 22 in. bellows 3 8 6
2 ft. 2 in. wide, 2 ft. 10 in.
high, 24 in. bellows 4 1 6
*Sizes generally supplied.

Prices of Double-Blast on application.

Best warranted extra leathered and double nailed.
24 26 28 30 32 34 36 38 40 42 in.
41/6 49/- 55/- 65/- 75/- 90/- 115/- 143/- 180/- 215/-
Extra best, extra leathered and double nailed, with two
frames in top.

46/6 54/6 61/- 72/6 83/6 100/- 127/6 159/6 200/- 240/-
Prices of smaller or larger sizes on application.

Packing in canvas, up to 30 in., 1/6 per pair extra.
Ditto above 30 in., 2/- ditto

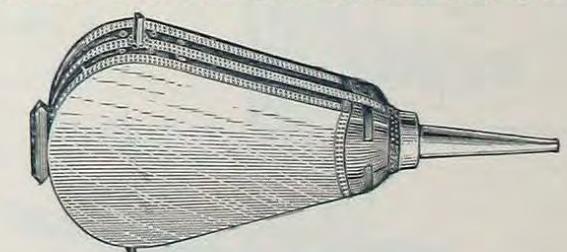
These qualities are generally supplied, but cheaper can be
had if desired.

Any description of Smith's Bellows made to order.

STANDARD QUALITY, Warranted—
18 20 22 24 26 28 30 32 34 in.
69/- 79/6 92/6 105/6 119/- 138/- 160/- 180/- 214/-
WEI HTS—
For 18 & 20 22 & 24 26, 28 & 30 32 & 34 inch.
6/- 7/6 8/9 13 6 set extra.

The varieties described represent in many cases but a small selection from those that can be supplied. Further details will be sent on receipt of requirements.

LONG SHAPE SMITHS' BELLOWS.



N 6397.

Best warranted extra leathered and double nailed.
24 26 28 30 32 34 36 38 40 42 in.
41/6 49/- 55/- 65/- 75/- 90/- 115/- 143/- 180/- 215/-
Extra best, extra leathered and double nailed, with two
frames in top.

46/6 54/6 61/- 72/6 83/6 100/- 127/6 159/6 200/- 240/-
Prices of smaller or larger sizes on application.

Packing in canvas, up to 30 in., 1/6 per pair extra.
Ditto above 30 in., 2/- ditto

ENGINEERS' AND SMITHS' TOOLS.

75

HAMMERS.



N 6398.



N 6399.



N 6400.



N 6401.

N 6398.—All Cast Steel Engineer's, either ball, straight, or cross pane, 1 lb. and upwards, 8d. per lb.

Ditto ditto $\frac{1}{2}$ and $\frac{3}{4}$ lb., 9d. each.

N 6399.—All Cast Steel Smith's Hand, cross or straight pane, or double faced, 2 lbs. and upwards, 8d. per lb.

N 6400 or N 6401.—All Cast Steel Sledge, either cross or straight pane, or double faced, 6 lbs. and upwards, 5d. per lb.

Hickory Handles—

15	18	21	inch.
2/2	2/9	3/2	dozen.
2 $\frac{1}{2}$ d.	3d.	3 $\frac{1}{2}$ d.	each.

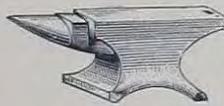
Ash Handles—

18	24	inch.
1/10	2/9	dozen.
2d.	3d.	each.

Hickory Sledge Handles, 36 in. ... 6/6 Dozen. 8d.

Ash ... 36 in. ... 4/- 5d.

SMITH'S ANVIL.



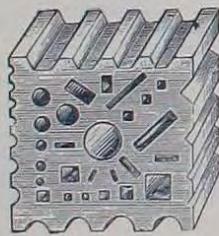
N 6404.

Smith's ordinary pattern, $\frac{4}{5}$ to 5 cwt. each, first quality, warranted, 33/6 per cwt.

Farrier's, with steeled bicks, 1/6 per cwt. extra.

Cheaper quality supplied, but not recommended.

NEW PATTERN SWAGE BLOCKS.



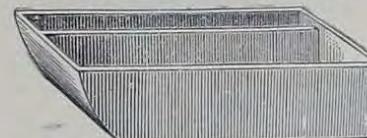
N 6408.

17 in. x 17 in. x 5 $\frac{1}{2}$ in. will weigh about 2 cwt. 2 qrs. 20 lbs. per cwt.

12 $\frac{1}{2}$ in. x 12 $\frac{1}{2}$ in. x 4 $\frac{1}{2}$ in. will weigh about 1 cwt. 15 lbs. per cwt.

Cast iron Stands for the above, per cwt.

SMITH'S TROUGH.

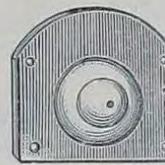


N 6409.

Made in a variety of sizes and shapes. Price as drawn, with round end and divisions, 3 ft. long x 16 in. wide (9 in. for coal and 7 in. for water) x 12 in. deep, 32/- each. Smiths' Cones also supplied.

For Wheelplates, see page 73.

IMPROVED SMITH'S HEARTH BACK, WITH TUE IRON.



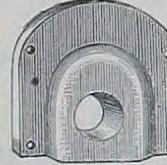
N 6402.

Size of Blast Hole.

Size 13 x 14 in.	... $\frac{3}{4}$ to 1 in.	... 6/3 each.
" 14 x 15 in.	... $\frac{5}{8}$ to 1 $\frac{1}{2}$ in.	... 7/9 "
" 15 x 16 in.	... 1 to 1 $\frac{1}{4}$ in.	... 10/- "
" 18 x 19 in.	... 1 $\frac{1}{2}$ to 1 $\frac{3}{4}$ in.	... 14/6 "

If with nuts, pins, and plates, 2/- extra.

HEARTH BACK FOR WATER BOSH.

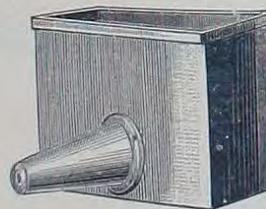


N 6405.—Size 18 in. high x 19 in. wide, 12/6 each.

" 15 in. " x 16 in. " 8/3 "

With nuts, pins, and plates complete.

IMPROVED WATER BOSH.



N 6406.

Long.	Deep.	Wide.	Size of Blast Hole.	Each.
1 ft. 9 in.	1 ft. 9 in.	7 $\frac{1}{2}$ in.	$\frac{5}{8}$ to 1 $\frac{1}{8}$	31/-
2 ft.	1 ft. 11 in.	9 in.	1 $\frac{1}{8}$ to 1 $\frac{1}{2}$	36/6
2 ft. 3 in.	2 ft. 1 in.	10 $\frac{1}{2}$ in.	1 $\frac{1}{4}$ to 1 $\frac{1}{2}$	47/-

GRINDSTONES.



N 6412.

Improved Grindstones, in cast frame, wrought treadle and handle.

With stone 18 x 3 in. ... 32/- each.
" 24 x 4 in. ... 52/- "

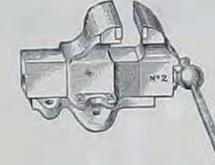
N 6413.—Grindstones in cast-iron trough, best quality stones and well fitted.

6 in. 8 in. 10 in. 12 in. stone.
6/- 8/- 10/- 12/- each.

N 6414.—Price of Grindstones only, best blue, similar to Bilston.

6 in. 8 in. 10 in. 12 in. 15 in. 18 in.
1/2 1/8 1/11 2/2 2/11 4/- each.
24 x 3 $\frac{1}{2}$ 30 x 4 36 x 4 $\frac{1}{2}$ 42 x 5 $\frac{1}{2}$ 48 x 6 $\frac{1}{2}$ in.
5/6 10/- 18/- 27/6 38/- each.

IMPROVED PARALLEL VICE.



N 6403.

Made of best cast-iron, with steeled jaws.

No. 0, opens 2 $\frac{3}{4}$ in., width of jaw, 2 $\frac{1}{2}$ in., 6/3 each.

" 1, " 3 $\frac{1}{2}$ in., " 3 in., 7/3 "

" 2, " 4 in., " 3 $\frac{1}{2}$ in., 11/3 "

" 3, " 4 $\frac{1}{2}$ in., " 4 in., 15/6 "

" 4, " 5 $\frac{1}{2}$ in., " 4 $\frac{1}{2}$ in., 22/- "

INSTANTANEOUS GRIP VICE.

N 3084.—For Engineers and Metal Workers.

No. Width of Jaw. Opening. Weight. Price.

5 3 $\frac{1}{2}$ in. 3 $\frac{1}{2}$ in. 33 lb. £1 6 6

6 3 $\frac{1}{2}$ in. 4 $\frac{1}{2}$ in. 42 $\frac{1}{2}$ lb. 1 12 6

7 4 $\frac{1}{2}$ in. 4 $\frac{1}{2}$ in. 61 lb. 1 18 0

8 5 $\frac{1}{2}$ in. 6 $\frac{1}{2}$ in. 75 lb. 2 3 9

8a 6 in. 6 $\frac{1}{2}$ in. 80 lb. 2 9 6

Larger and special sizes quoted for on application.

SMITH'S VICE.



N 6407.

Black Staple, solid box, 30 lbs. each and upwards, first quality, warranted, 5 $\frac{1}{2}$ d. per lb.

Under 30 lb., 6 $\frac{1}{2}$ d. per lb.

Approximate weights.

Width of jaw.

3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	5 $\frac{1}{2}$	6	6 $\frac{1}{2}$	in.
23	33	45	58	72	95	104	127	lbs.

Spare solid boxes and pins, 11 $\frac{1}{2}$ d. per lb.

IMPROVED PORTABLE VICE BENCH.



N 6411.

Small size, fitted with best warranted solid Box Vice, 3 $\frac{1}{2}$ in. jaws, weight about 30 lbs. £2 1 0

Medium, fitted with best warranted solid Box Vice, 4 $\frac{1}{2}$ in. jaws, weight about 56 lbs. 2 14 6

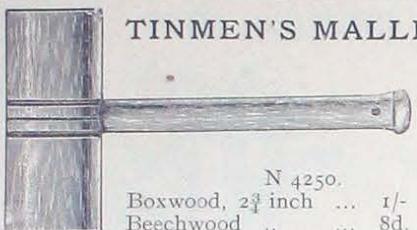
Large size, fitted with best warranted solid Box Vice, 6 in. jaws, weight about 85 lbs. 3 12 6

Also supplied mounted on wheels, or fitted with parallel vice.

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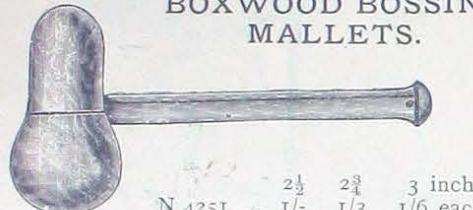
PLUMBERS', GLAZIERS', AND TINMEN'S TOOLS.

TINMEN'S MALLETS.



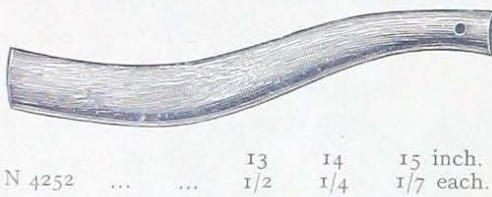
N 4250.
Boxwood, $2\frac{3}{4}$ inch ... 1/- each.
Beechwood " ... 8d. "

BOXWOOD BOSSING MALLETS.



N 4251 ... $2\frac{1}{2}$ $2\frac{3}{4}$ 3 inch.
1/- $1\frac{1}{3}$ $1\frac{1}{6}$ each.

BOXWOOD BOSSING STICKS.



N 4252 ... $1\frac{3}{4}$ $1\frac{4}{5}$ $1\frac{5}{6}$ inch.
 $1\frac{1}{2}$ $1\frac{1}{4}$ $1\frac{1}{7}$ each.

PLUMBERS' DRESSERS, BEECHWOOD.



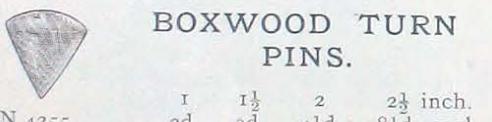
N 4253 1/- each.

BOXWOOD CHASE WEDGES.



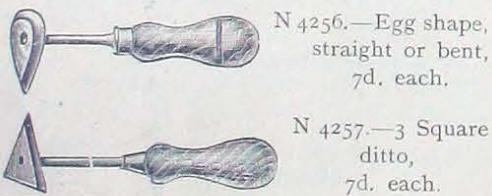
N 4254 2 $2\frac{1}{2}$ 3 inch.
9d. rod. 1/- each.

BOXWOOD TURN PINS.



N 4255 ... 1 $1\frac{1}{2}$ 2 $2\frac{1}{2}$ inch.
2d. 3d. $4\frac{1}{2}$ d. $8\frac{1}{2}$ d. each.

PLUMBERS' SHAVE HOOKS.



N 4256.—Egg shape, straight or bent, 7d. each.

N 4257.—3 Square ditto, 7d. each.

The varieties described represent in many cases but a small selection from those that can be supplied. Further details will be sent on receipt of requirements.

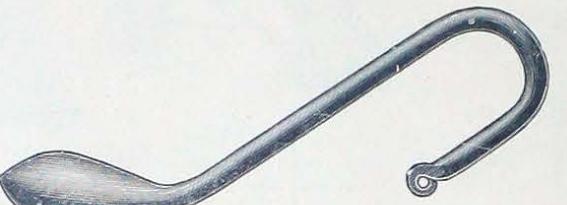
STONE MASON'S MALLETS.



N 4258.—Beechwood.

6 $1\frac{1}{4}$ 7 $1\frac{1}{10}$ 8 $2\frac{1}{8}$ inch.
each.

PLUMBERS' SOLDERING IRONS.

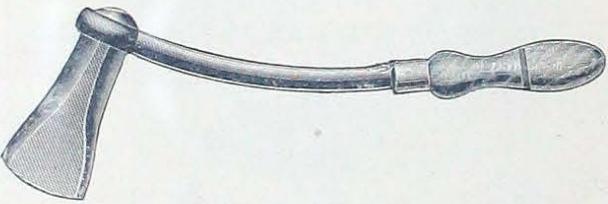


N 4259 $2\frac{1}{2}$ 3 $3\frac{1}{2}$ 4 lbs.
 $1\frac{1}{8}$ $2\frac{1}{2}$ $2\frac{1}{4}$ $2\frac{1}{8}$ each.

TINMEN'S SOLDERING IRONS.



N 4260.— $\frac{1}{2}$ $\frac{3}{4}$ 1 $1\frac{1}{4}$ $1\frac{1}{2}$ $1\frac{3}{4}$ 2 lb.
 $2\frac{1}{2}$ $2\frac{1}{6}$ $2\frac{1}{9}$ $3\frac{1}{2}$ $3\frac{1}{4}$ $3\frac{1}{9}$ $4\frac{1}{3}$ each



N 4261.— $\frac{1}{2}$ $\frac{3}{4}$ 1 $1\frac{1}{4}$ $1\frac{1}{2}$ $1\frac{3}{4}$ 2 lbs.
Hatchet shape $2\frac{1}{2}$ $2\frac{1}{6}$ $2\frac{1}{9}$ $3\frac{1}{2}$ $3\frac{1}{4}$ $3\frac{1}{9}$ $4\frac{1}{2}$ each.

PLUMBERS' MELTING LADLES.



N 4262.— $2\frac{1}{2}$ 3 $3\frac{1}{2}$ 4 $4\frac{1}{2}$ 5 6 7 8 inch.
9d. rod. 11d. $1\frac{1}{1}$ $1\frac{1}{4}$ $1\frac{1}{7}$ $2\frac{1}{3}$ $2\frac{1}{9}$ $3\frac{1}{3}$ each.

PLUMBERS' CHIPPING KNIVES.



N 4263.—5 inch 1/2 each.

HACKING KNIVES.



N 4264 $1\frac{1}{2}$ 5 6 inch.
N 4265.—Straight back 7d. $1\frac{1}{7}$ each.

GLAZIERS' PUTTY KNIVES.



N 4266.—Notched, $\frac{1}{4}$ inch ... 8d. each.
N 4267.—Plain, $\frac{1}{4}$ " ... $7\frac{1}{2}$ d. "

PUTTY OR STOPPING KNIVES.



N 4268.—5 inch $9\frac{1}{2}$ d. each.
N 4269.—Chisel point do. $4\frac{1}{2}$ 2 inch 11d. "

PALETTE KNIVES.



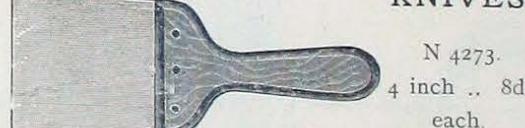
N 4270 6 7 8 9 10 12 inch.
N 4271.—Balanced handle $1\frac{1}{1}$ $1\frac{1}{5}$ $1\frac{1}{8}$ 2 $2\frac{1}{2}$ $2\frac{1}{8}$ $4\frac{1}{6}$ "

PAINTERS' STRIPPING KNIVES.



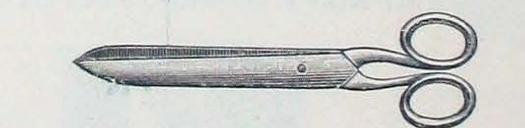
N 4272. 5 inch \times 3 inch,
 $1\frac{1}{4}$ each.

PAPERHANGERS' STRIPPING KNIVES.



N 4273. 4 inch ... 8d. each.

PAPERHANGERS' SCISSORS.



N 4274 9 10 11 inch.
 $3\frac{1}{2}$ $3\frac{1}{9}$ $4\frac{1}{6}$ pair.

GLASS CUTTERS.

N 4275 6d. each.

GLAZIERS' DIAMONDS.

N 4276.—C quality, for crown glass ... $11\frac{1}{6}$ each.
B " large spark " ... $16\frac{1}{2}$ " ...
A " for sheet glass ... $20\frac{1}{2}$ " ...
S " thin plate glass ... $24\frac{1}{2}$ " ...

PAINT KETTLES.



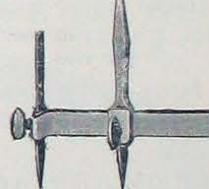
No. 2/0 0 1 2 3 6 pints.
1 2 3 4 5
N 4277.—Tin $4\frac{1}{2}$ d. 7d. rod. 1/- $1\frac{1}{3}$ each.
N 4278.—Galvanized Iron, with hook—
 6 8d. 7 rod. 1/- each.

GLUE POTS.



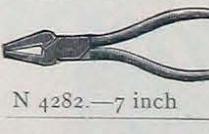
N 4279.—Tinned pan—
 $\frac{3}{4}$ 1 $1\frac{1}{2}$ $2\frac{1}{2}$ $3\frac{1}{2}$ 5 pints.
 $1\frac{1}{4}$ $1\frac{1}{8}$ $2\frac{1}{3}$ $3\frac{1}{4}$ $4\frac{1}{6}$ $5\frac{1}{8}$ each.
N 4280.—Copper pan—
 $\frac{3}{2}$ 1 $1\frac{1}{2}$ $2\frac{1}{2}$ $3\frac{1}{2}$ 5 pints.
 $2\frac{1}{8}$ $3\frac{1}{2}$ $4\frac{1}{3}$ $5\frac{1}{8}$ $7\frac{1}{9}$ $9\frac{1}{8}$ each.

WASHER CUTTER.



N 4281.
Single ... 2/6 each.
Double ... 3/6 "

GLASS PLIERS.



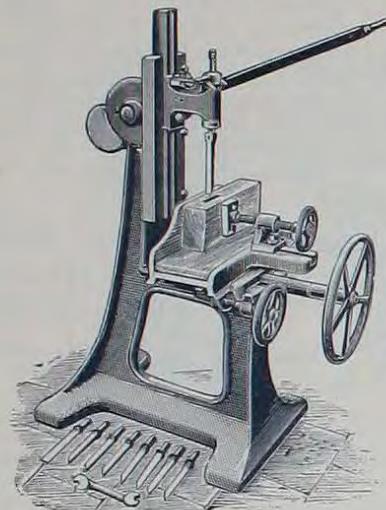
N 4282.—7 inch 2/3 pair.

OIL STONES



N 4283.—Turkey, 8 or 9 \times 2 \times $1\frac{1}{4}$ in. 1/6
N 4284.—Washita, do. do. 1/4
N 4285.—Canadian, 7 to 8 \times 2 to $2\frac{1}{4}$ \times $\frac{3}{4}$ to $1\frac{1}{4}$ in. 5d.
N 4286.—Turkey slips, 4 to 5 in. each 11d.
N 4287.—Washita do. do. 8d.

THE "CHALLENGE" MORTICING MACHINE.



N 6500.

In designing and constructing the above machine, the maker's aim has been to make a Mortice Machine to come in at an exceedingly low price, and which for simplicity, efficiency, and accuracy in all its working parts, cannot be surpassed.

It is suitable for working either hard or soft wood, thus making it a most acceptable machine for all classes of joiners, builders, cabinet makers, &c., &c.

The frame itself is made all in one casting. By this means a strength and solidity is given to the machine, which is not only very desirable but very necessary where good work is required to be done.

The wrought iron lever which is used for bringing the chisel down to its work is so placed that when the workman is using the machine he stands in an easy and convenient position for operating on and seeing the work he is doing.

The chisels are made from a high-class steel, specially manufactured for morticing purposes.

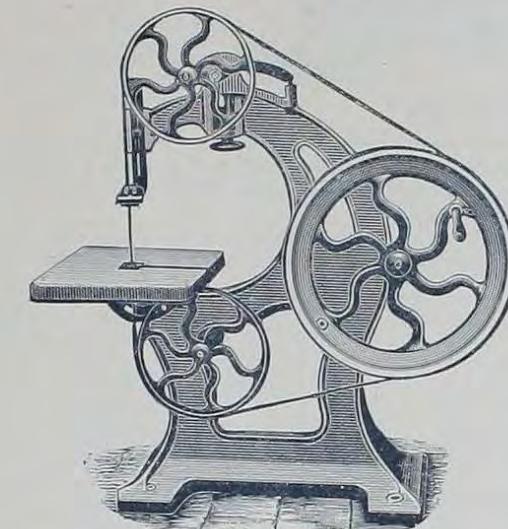
Each chisel is fitted with a pin, which fits in the slot hole in a taper socket in chisel box, this keeps it immovable and perfectly true in reversing, thus by a half turn of chisel box handle the chisel is reversed truly.

This machine will mortice 6 inch deep, and take work on the movable table 16 inch x 7 inch. Weight of machine, 3 cwt. 3 qrs.; with boring apparatus, 4 cwt.

£ s. d.
Price of machine including eight chisels, $\frac{1}{4}$ inch to $\frac{3}{4}$ inch, one spanner and one core driver (without boring apparatus) ... 8 8 0

Price of machine with boring apparatus, including three bits for iron, and three for wood ... 9 9 0

THE IMPROVED "GEM" BAND SAWING MACHINE.



N 6501.

Having often had enquiries for a good Hand Band Saw Machine, and one that could, when required, be converted into a machine to be worked by steam power, we can recommend above machine as being such an one. It is strongly built, the pillar being one solid casting; it is compact and complete in itself, occupies little room, and works by hand with greater ease than any other hand machine of its class. We introduce it to the trade with full confidence in its working, feeling certain that it will not fail to give satisfaction to anyone requiring such an article.

It is fitted with tension motion to allow for expansion or contraction of saw whilst working.

The table is made to cant for cutting work on the bevel.

It will admit of work 11 inch deep.

When worked by steam power, speed of driving pulleys should be about 100 revolutions per minute.

£ s. d.
No. 2 size, with band saw pulleys each 16 inch diameter, and fly-wheel 28 inch diameter, with angle bracket for tenoning, one screw-key, and one $\frac{3}{8}$ inch saw, sharpened and set ready for use. Weight, 5 cwt. 2 qrs. ... Price 10 10 0

No. 1 size, with band saw pulleys each 20 inch diameter, and fly-wheel 32 inch diameter, with angle bracket for tenoning, one screw-key, and one $\frac{3}{8}$ inch band saw sharpened and set ready for use. Weight, 7 cwt. ... Price 13 10 0

A boring apparatus, with 1 inch auger, may be attached to either machine... Price extra 2 0 0

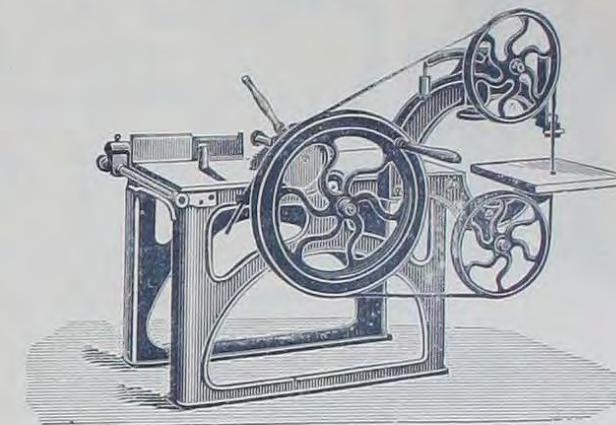
Either machine may be made so as to work by steam power, by placing a pair of pulleys behind fly-wheel. With one pair 9 in. pulleys, price extra 0 12 6

Ditto, with one pair 12 inch pulleys ... 0 15 0

Belt, fork, and striking gear for ditto ... 0 12 0

For steam power the No. 1 size is recommended.

HAND-POWER COMBINED CIRCULAR AND BAND SAWING MACHINE.



N 6502.

Will cut with 14 inch circular saw, $4\frac{1}{2}$ inch deep, with band saw 6 inch deep. Approximate weight, 8 cwt. 2 qrs.

Table for above bench is 4 feet x 2 feet, substantially made of iron, planed true on the top. It is fitted with rising and falling spindle, self-acting feed motion; parallel fence made to cant so as to cut bevels, and also to turn over end of bench, to be out of the way of cross cutting. It is also fitted with weight and roller, for keeping timber to fence.

With this bench one man can cut 3 inch deep at the rate of 10 feet in four minutes, or 2 inch deep at the rate of 10 feet in 2 minutes, thus effecting a saving of 150 per cent. over what can be done with the hand saw.

Band saw apparatus is fitted with square table, made so as to cant over for cutting to any bevel: with this may be cut any irregular, curved, or ornamental design, with an ease not attained before by any hand power-machine. The band saw is fitted with a new arrangement for securing equal tension to saw at all times.

	£ s. d.
Price of above machine, with one each 9 inch and 14 inch circular, and one band saw $\frac{3}{8}$ inch	22 0 0
Ditto, if with boring apparatus, and one patent auger	24 0 0

Ditto, if with patent apparatus for steam power as well as hand	extra 2 0 0
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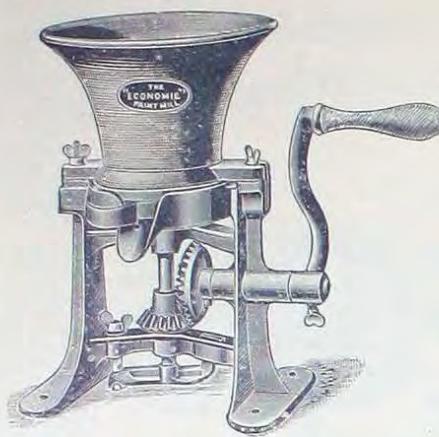
Ditto, if for steam power only and not for hand	1 10 0
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Price for band saw apparatus, to attach to wood bench with one saw $\frac{3}{8}$ inch	8 0 0
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Hand power circular saw bench only, with one each 9 inch and 14 inch saw, feed motion, and six rollers for extending bench...	12 10 0
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Ditto, without feed motion or the six rollers	10 10 0
---	---------

If prepared to work by hand or steam	extra 0 10 0
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NEW
PATTERN
PAINT
MILL.

WITH
LATEST
IMPROVE-
MENTS

N 3094.					
Diameter of Grinding Cones.	Diameter of Hopper at Top.	Approximate Capacity of Hopper.	Approximate Weight of Mill.	Price each.	
4½ ins.	7½ ins.	1 quart	22 lbs.	30/6	
6 "	10½ "	1 gallon	38 "	45/-	
6 "	fitted with fast and loose pulleys, belt fork and pedestal for power		.. ..	64/-

This Mill is recommended as the best value in the market, and the six-inch is a useful size for most workshops.

The grinding parts are fitted very accurately, the cones being cut by special machinery, so that colours can be finely ground for best work; also by a simple adjustment the machine can be used for grinding up old paint or mixing colour with rapidity.

The Hopper and Trough are lined with porcelain enamel, so as to be easily cleaned, and a spout is provided for delivering the ground material, which is a great improvement. By means of a simple adjustment, the Mill can be instantly converted into an excellent mixer.

BOTTLE JACKS.

N 6516.—With cast iron frame

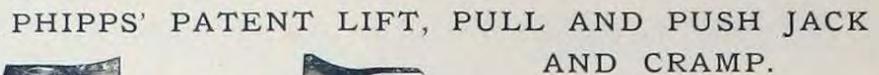
Size No.	Height when down.	Diameter of Screw.	Tested to	Price.
1	12 in.	1 $\frac{1}{2}$ in.	1 $\frac{1}{2}$ ton.	£0 5 9
2	15 "	1 $\frac{1}{2}$ "	2 "	0 6 9
3	18 "	1 $\frac{3}{4}$ "	4 "	0 8 9
4	21 "	1 $\frac{3}{4}$ "	5 "	0 10 0
5	24 "	1 $\frac{7}{8}$ "	6 "	0 13 0
6	24 "	2 $\frac{1}{8}$ "	8 "	0 15 3
7	24 "	2 $\frac{3}{8}$ "	10 "	0 18 0



HALEY'S SCREW JACKS.
N 6517.—With forged steel pinions and
wrought iron case hardened wheels
with wood cases.

Size No.	Height when down.	Diameter of Screw.	Tested to	Price.
1	29 in.	1 $\frac{3}{4}$ in.	2 ton.	£2 3 0
2	31 "	2 "	4 "	2 13 6
3	32 "	2 $\frac{1}{4}$ "	6 "	3 1 0
4	34 "	2 $\frac{3}{4}$ "	8 "	3 15 0
5	34 "	2 $\frac{3}{4}$ "	10 "	4 2 0
6	37 "	3 "	12 "	5 4 6
7	39 "	3 $\frac{1}{2}$ "	16 "	8 0 6
8	40 "	3 $\frac{3}{4}$ "	20 "	10 5 6

Nos. 1 and 2 are not sent with Side Handles



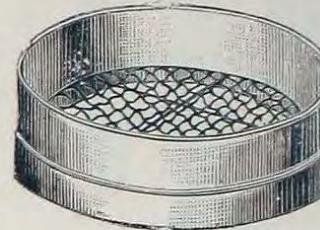
WITH LUGS FOR CHAIN, HOOK,
WIRE OR ROPE.

N 3086.

These extremely useful little Tools will be found most handy for a thousand purposes, are very strong and well fitted, and possess great power. The Central Block and Screws are a Solid Steel Forging, with right and left hand Square Thread. The Heads are Malleable Iron.

Mechanics who have used them, declare they are just the article so much wanted in every workman's kit, are a marvel of cheapness, and will save time and money.

	Size.	Height when Down.	Diam. of Screw.	PRICE.	Weight Lbs.
A	1 ton.	6 in. $\frac{1}{8}$ in.	8/6	2 $\frac{3}{4}$
B	1 "	8 "	8/6	4 $\frac{1}{2}$
C	1 $\frac{1}{2}$ "	10 "	11/-	9 $\frac{1}{2}$
D	2 "	12 "	13/6	13 $\frac{1}{2}$
E	4 "	14 "	19/-	21 $\frac{1}{2}$
F	6 "	16 "	24/-	34
G	8 "	18 "	29/6	48
H	10 "	20 "	39/6	75

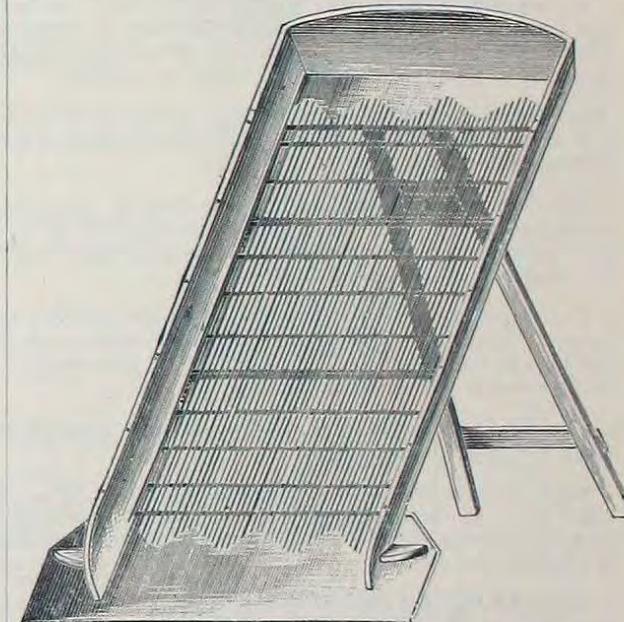


RIDDLES,
GALVANIZED
IRON WIRE.

	N 6508.					
	18 x $\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$ in. mesh.
Single wood hoop	—	25/-	19/3	14/9	14/-	12/- dozen.
	—	2/3	1/10	1/5	1/4	1/2 each.
Double	„	4/-	4/-	3/6	3/-	2/9 2/8 „
Galvanized iron	„	—	23/9	21/-	20/-	20/- 20/- dozen.
hoops	„	—	2/2	1/11	1/10	1/10 1/10 each.

LIME SCREENS

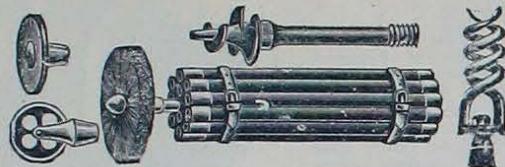
N 6509



An illustration of an 'Improved Hand Mortar Mill'. The device features a large, multi-spoked wheel on the left connected by a shaft to a smaller wheel. A hopper is positioned above a rotating cylindrical drum. The drum has a vertical slot on its side. A long, thin rod or lever is shown being pushed into the drum to facilitate the discharge of material. The entire apparatus is mounted on a simple wooden frame.

The varieties described represent in many cases but a small selection from those that can be supplied. Further details will be sent on receipt of requirements.

DRAIN CLEANSING MACHINES.



N 4290.

30 foot Drain Cleansing Machine, consisting of ten 3 foot best stout red malacca rods, fitted with best brass screws, double worm screw, brass clearing wheel, 4 inch india rubber plunger, Archimedean screw, and straps, complete £1 7 6

40 foot	...	...	...	...	...	...	...	£1 16 6
50 foot	...	...	...	...	...	...	2 4 0	
60 foot	...	...	...	...	...	...	2 15 0	
70 foot	...	...	...	...	...	...	3 4 0	
80 foot	...	...	...	...	...	...	3 12 6	
90 foot	...	...	...	...	...	...	3 17 0	
100 foot	...	...	...	...	...	...	4 3 6	
200 foot	...	...	...	...	...	...	7 18 6	

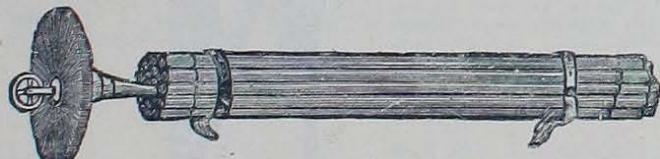
Chimney Sweeps' Brush, extra 0 2 9

The Machine can be used for Chimney Sweeping also.

Best Stout Red Malacca Cane Rods, fitted with best brass screws—

	s. d.			s. d.			
2 foot	...	each	1 6	4 foot	...	each	3 0
2 foot 6 inch	...	"	1 10	4 foot 6 inch	...	"	3 4
3 foot	...	"	2 6	5 foot	...	"	3 8
3 foot 6 inch	...	"	2 9				

CHIMNEY SWEEPING MACHINES.



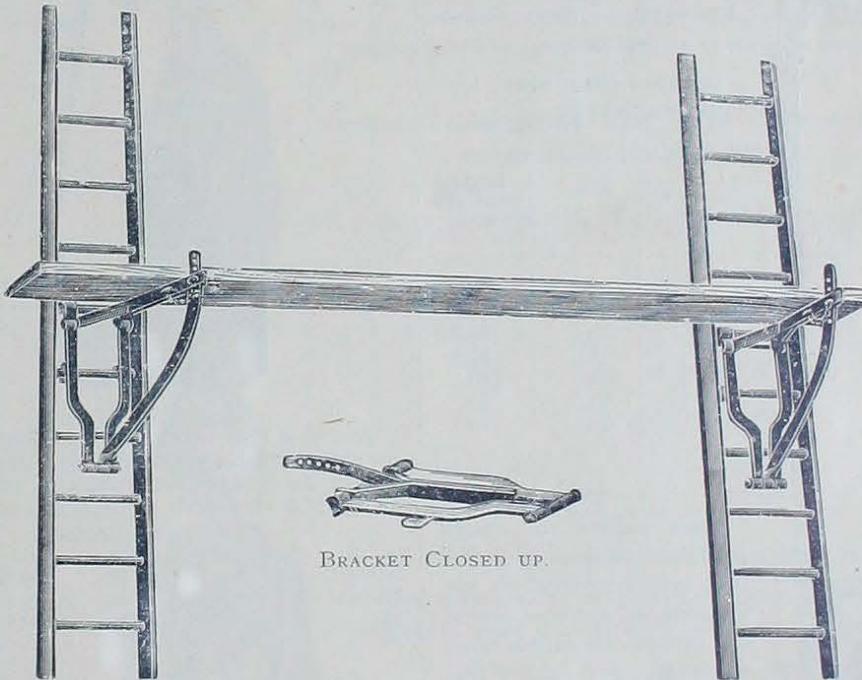
N 4291.

40 foot Chimney Sweeps' Machine, best stout red malacca canes, fitted with best brass screws, 4 foot or 4 foot 6 inch lengths, with 18 inch Chimney Sweeps' Bass Brush, patent wheel and cup, leathers and straps complete, as shown £1 13 0

50 foot	...	...	...	...	...	2 0 0
60 foot	...	...	...	...	...	2 6 6
70 foot	...	...	...	...	...	2 13 0
80 foot	...	...	...	...	...	2 19 6
90 foot	...	...	...	...	...	3 6 0
100 foot	...	...	...	...	...	3 12 6

PATENT ADJUSTABLE WROUGHT IRON LADDER BRACKETS.

Safe, light and compact absolutely steady in use, and without the least side motion. Suitable for forming a Platform instantly, at any height, for painting, pointing, gutter fixing, etc.



BRACKET CLOSED UP.

N 4292. 25/- per pair.

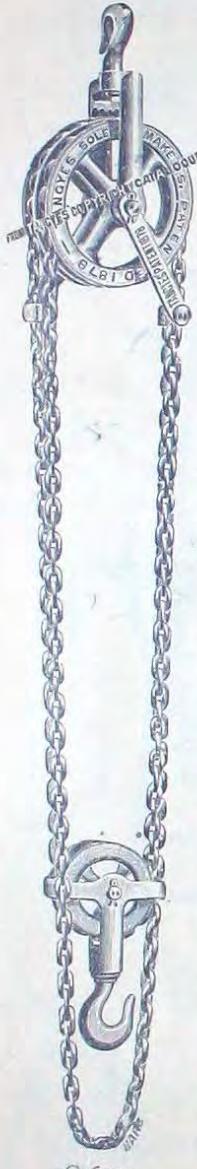
Takes a plank 14 inches wide. Weight about 26 lbs.

It hooks on to two rungs of each ladder, and on either side of ladder, and is supplied to suit ladders of 9 inch rise of tread, unless otherwise ordered.

PULLEY BLOCKS AND HOISTS.

IMPROVED WESTON'S DIFFERENTIAL PULLEY BLOCKS.

WITH PATENT SWIVELLING RADIAL CHAIN GUIDES.



G 6514.

When sheaves or other parts are required for renewal it is necessary to give the consecutive number stamped on the side strap of top frame.

The chain passes through two movable guides, as shown in sketch; this prevents the chain from twisting or catching, and allows it to be worked either by a "side pull" or direct "down pull."

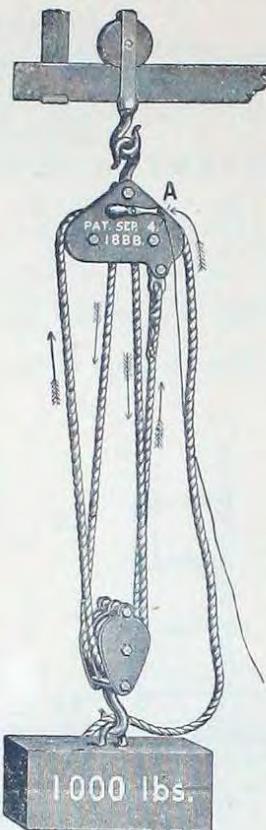
PRICES OF PATTERN SHOWN IN SKETCH.

Requires chain about four times length of lift.

Tested to	Blocks per set.	Bright Chain per foot.
5 cwt.	8/6	6d.
10 "	11/6	6d.
15 "	13/-	6½d.
20 "	16/-	6½d.
30 "	25/-	8d.
40 "	32/-	9d.
60 "	40/-	11d.

These pulleys and chains are tested to the powers respectively stated (which are intended as extreme limits) and the greatest care is taken to ensure iron of the best quality; but it is distinctly understood we do not hold ourselves responsible for the effects of any chain, &c., breaking. It is advisable to allow a suitable margin when ordering.

PATENT SURE-GRIP TACKLE BLOCKS.

N 6511.
1,000 lbs.

Will hold load at any point without fastening the rope. The brake is absolutely automatic—the heavier the load the better the grip, and it is disengaged by very slight pressure on the trip cord.

PRICES OF BLOCKS—

Using	One man can lift	Capacity
No. 3. — $\frac{3}{8}$ in. rope	300 lbs.	600 lbs. ... 12/6
No. 4. — $\frac{1}{2}$ in. "	350 lbs.	1,000 lbs. ... 23/-
No. 5. — $\frac{3}{4}$ in. "	400 lbs.	1,800 lbs. ... 30/-
No. 6. — $\frac{3}{4}$ in. "	450 lbs.	2,500 lbs. ... 36/-
No. 4 $\frac{1}{2}$.—Double $\frac{1}{2}$ in. "	600 lbs.	3,000 lbs. ... 42/-
5 $\frac{1}{2}$.— " $\frac{3}{8}$ in. "	700 lbs.	3,500 lbs. ... 50/-
6 $\frac{1}{2}$.— " $\frac{3}{4}$ in. "	850 lbs.	5,000 lbs. ... 60/-

PRICES OF HEMP ROPES—

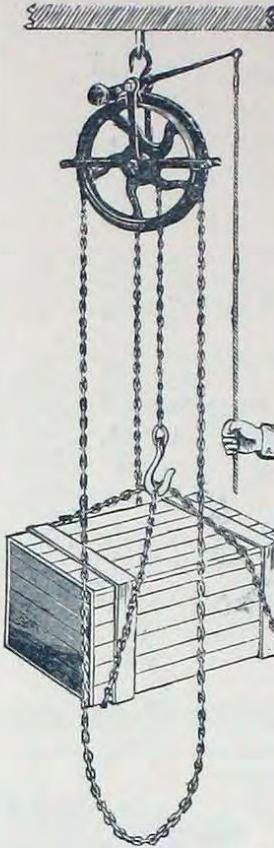
$\frac{3}{8}$ inch, 2d. per yard; $\frac{1}{2}$ inch, 3d. per yard.	$\frac{3}{4}$ inch, 4d.	$\frac{3}{4}$ inch, 5d.
For single blocks, Nos. 3, 4, 5, and 6, five lengths of rope are required; for double blocks, Nos. 4 $\frac{1}{2}$, 5 $\frac{1}{2}$, and 6 $\frac{1}{2}$, eight lengths.		

When ordering blocks and ropes give height to be raised.

Instructions for Reeling.—Enter rope at A, pass wedge, and follow arrows as shown in cut. It will be noticed the two centre ropes coming in contact with wedge always travel in same direction at same time. Take the twist out of rope before reeling.

Price of travelling gear on receipt of requirements.

QUICK ACTION CHAIN HOIST.



Having two wheels of different diameters connected together, the smaller one carrying the lift chain and the larger one the endless hand chain, the empty chain descending simultaneously with the raising of the load.

The size in greatest demand is No. 2, to lift 5 cwt., and is recommended in preference to the 2½ cwt.

In ordering endless hand chains, shorter than the lift chains, for working from overhead floors, please note that it is our practice to measure endless chains double, i.e., to describe a hand chain measuring 20 ft. all round as "10 feet endless." When the hand and lift chains are one length, it is only necessary to state the height from the suspending hook to the ground.

The lift chain is supplied with rings or hooks, or both if desired.

T 6512.

No.	Tested to lift.	Diameter of large wheel.	Price of hoists without brake.	Price of lift or hand chains per foot.
1	2½ cwt.	12 in.	£0 15 0	7d.
2	5 cwt.	16½ in.	1 0 0	7d.
3	7½ cwt.	20 in.	1 5 0	8d.
4	10 cwt.	24 in.	1 10 0	8d.

Extra for Ordinary Brake, as drawn, having a lever and cord, by pulling which the operator can lower the load with great ease and safety; a balance weight releases the brake when not required 10/- each. Each foot of height requires 3 feet of chain.

WALL CRAB HOIST.

Size 16 in. x 12 in. x 10 in. from wall, with a 2½ in. x 6 in. barrel.

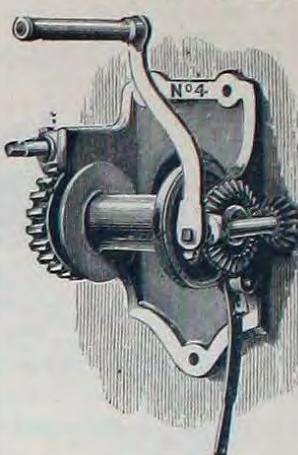
Requires 10 revolutions of the handle to 1 revolution of the barrel. Allowing 40 revolutions of the handle it will lift a weight not exceeding 5 cwt. about 3 feet per minute. It cannot run down without the handle being turned.

Especially adapted to Carriage-houses for lifting wagonette heads.

No. N1 £1 10 0

Suitable bolts for fixing to 9 in. wall, 4/3 per set. Suitable wire rope, 7d. per foot.

WALL CRAB HOIST.



Size 24 in. x 22 in. x 16 in. from wall, with 3 in. x 9 in. barrel.

On the left-hand side is the worm-and-wheel gear, giving great power (up to 10 cwt.) with slow speed, and on the right-hand side, quick speed, capable of lifting 3 cwt. thirteen feet per minute, and of lowering by brake if desired.

No. N4 £3 18 0

Suitable Bolts for 9 in. wall, 6s. per set.

" Wire rope 7d. to 10d. per foot.

" Chain rod. per foot.

STANDARD SACK HOIST.



Self-sustaining; no ratchets or springs; no brake cords; both ends of chain can be used.

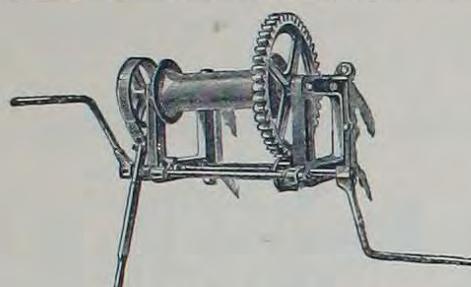
By using this Hoist one man can do double work with greater ease. He can release the Chain and rest at every pull.

Tested to	Price	HAND AND LIFT CHAINS	
		For 10 feet	Extra per foot
2 cwt.	£2 2 0	£0 17 6	7d.
5 "	2 12 6	0 17 6	7d.
7 "	3 3 0	1 0	8d.

The varieties described represent in many cases but a small selection from those that can be supplied. Further details will be sent on receipt of requirements.

CRAB WINCHES AND PULLEY BLOCKS.

81

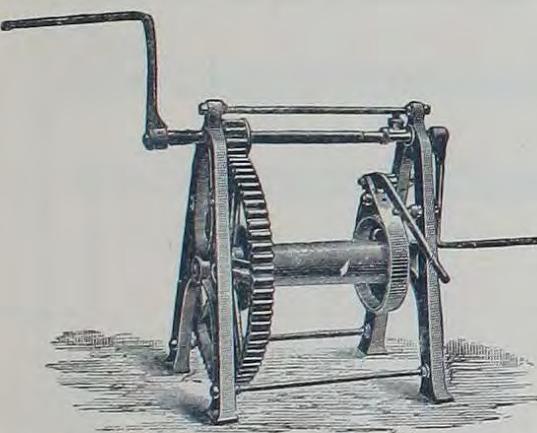


WALL CRAB.

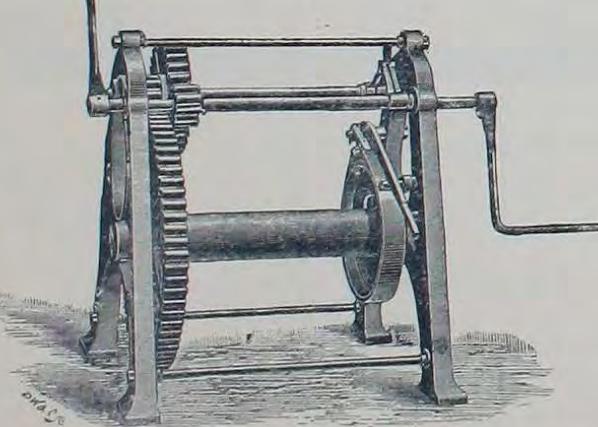
N 6519.

No.	SINGLE PURCHASE.			DOUBLE PURCHASE.			
	To lift with 2 and 3 sheave pulley blocks.	Price without brake.	Price with brake.	No.	To lift with 2 and 3 sheave pulley blocks.	Price without brake.	Price with brake.
I 2 ton	40/6	49/6	58/6	10 3 ton	58/6	68/-	
IA 3 ..	47/6	57/6	10A 4 ..	64/-	73/6		
2 4 ..	56/6	67/-	11 5 ..	78/-	90/-		
3 5 ..	65/-	77/6	11A 7 ..	97/6	112/-		
4 6 ..	85/6	97/6	12 9 ..	117/-	133/6		

The above will lift one-third the weight specified from the barrel direct.

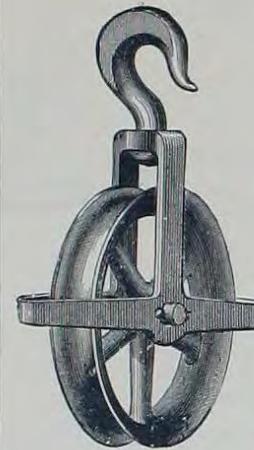


2WCR.



2WCR.

GIN BLOCKS OR RUBBISH PULLEYS.



N 6518.

Dia. of Pulley...ins.	6	8	10	12	14
Width of Groove ..	1	1 $\frac{1}{8}$	1 $\frac{1}{8}$	1 $\frac{1}{8}$	1 $\frac{1}{8}$
Price ... each	4/3	8/9	10/-	12/6	14/-

Dia. of Pulley...ins.	16	18
Width of Groove ..	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Price ... each	17/6	18/-

The actual width of Groove is from one-sixteenth to one-eighth more than list to allow for new rope being larger.

CRAB WINCH.

N 6520.

These Crabs are so constructed that the handles do not revolve when lowering by the brake. They have turned shafts, the bearings accurately bored, and steel keys.

SINGLE PURCHASE.

No. 0 ...	To lift with 2 and 3 sheave pulley blocks.	Price without brake.	Price with brake.	Extra if brass bushed.
1 ton	38/9	47/-	7/9	
2 ..	49/6	49/6	7/9	
IA ..	47/6	57/6	9/-	
2 ..	56/6	67/-	10/3	
3 ..	65/6	77/6	12/-	
4 ..	85/6	97/6	13/6	
5 ..	99/6	114/-	15/6	

DOUBLE PURCHASE.

No. 10 ...	To lift with 2 and 3 sheave pulley blocks.	Price without brake.	Price with brake.	Extra if brass bushed.
3 ton	58/6	68/-	10/6	
10A ..	64/-	73/6	12/3	
11 ..	78/-	90/-	14/3	
11A ..	97/6	112/-	16/3	
12 ..	117/-	133/6	18/9	
13 ..	141/6	158/6	21/3	
14 ..	183/-	203/-	28/6	
15 ..	235/6	257/6	32/6	
16 ..	292/6	317/-	32/6	

The above will lift one-third the weight specified from the barrel direct.

These Crabs can be fitted with fast and loose pulleys instead of handles, so as to be driven by power, the extra for which will be quoted on application. Estimates given for every description of Hoisting Crab Winches and Warehouse Cranes.

WROUGHT IRON PULLEY BLOCKS.

N 6515.

These blocks are of the best quality, and have turned shafts, bright sheaves, and are bored. The eye as shown in No. 4 is supplied with the smallest block of each pair ordered.

Diam. of sheave.	Width of groove.	Snatch block.	1 sheave block.	2 sheave block.	3 sheave block.	4 sheave block.	Blocks will take chain diam.
2 $\frac{1}{2}$ by $\frac{3}{8}$ in.		—	3/-	4/-	4/9	—	—
3 $\frac{1}{2}$..	$\frac{1}{2}$..	—	3/6	5/-	5/9	—	—
4 ..	$\frac{5}{8}$..	8/-	4/-	6/-	7/6	9/-	—
4 $\frac{1}{2}$..	$\frac{3}{4}$..	9/6	5/-	7/6	9/6	13/6	$\frac{3}{8}$ in.
5 ..	$\frac{3}{8}$..	11/6	6/3	9/9	12/6	16/-	$\frac{1}{4}$..
6 ..	1 ..	13/6	7/6	11/6	15/6	20/6	$\frac{7}{16}$..
7 ..	1 $\frac{1}{4}$..	16/6	10/-	16/-	22/-	31/-	$\frac{3}{8}$..
8 ..	1 $\frac{1}{2}$..	21/-	13/6	22/6	32/-	46/-	$\frac{7}{16}$..
9 ..	1 $\frac{3}{4}$..	28/-	19/-	32/-	46/-	65/-	$\frac{1}{2}$..

Larger sizes will be quoted for specially on receipt of requirements.

Revised Table giving Test Load in cwts. for each combination of above Blocks.

SIZE OF BLOCKS.	2 $\frac{1}{2}$ x $\frac{3}{8}$	3 $\frac{1}{2}$ x $\frac{1}{2}$	4 x $\frac{5}{8}$	4 $\frac{1}{2}$ x $\frac{3}{8}$	5 x $\frac{7}{8}$	6 x 1	7 x 1 $\frac{1}{2}$	8 x 1 $\frac{1}{2}$	9 x 1 $\frac{3}{4}$
1 and 1 sheave	2	5 $\frac{1}{2}$	9	15	22	33	44	65	87
2 .. 1 ..	2 $\frac{3}{4}$	8	13	21	31	47	62	93	124
2 .. 2 ..	3 $\frac{1}{2}$	10	16	26	39	58	77	116	154
3 .. 2 ..	4 $\frac{1}{2}$	12	19	30	45	68	90	135	180
3 .. 3 ..	5	14	22	34	51	78	102	154	205
4 .. 3 ..	—	—	24	38	56	83	112	167	220

The above Table must be treated as only approximate, and in no case can its accuracy be guaranteed.

All parts of these pulley blocks are interchangeable.

The actual width of groove is from one-sixteenth to one-eighth more than given to allow for new rope.

Prices with Brass Sheaves on application.

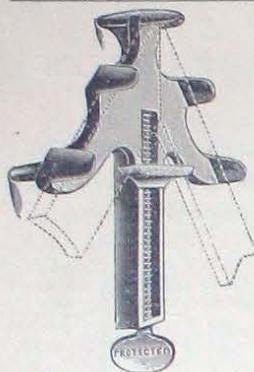
Quotations given for every description of Chain for Builders' and Contractors' use.



GALVANIZED
FLEXIBLE
STEEL
WIRE ROPE.

Circumference	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	3	inch.
Working Load	90	160	250	360	640	1000	1430	2540	3220	4000	5700	lbs.
5/3	6/9	10/3	12/8	15/6	17/9	19/6	21/-	23/6	26/9	33/6	100-ft.	

MITRE CUTTERS, CRAMPS AND BENCH SCREWS.



IMPROVED CORNER CRAMP.

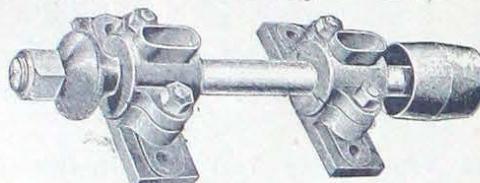
N 6521.

Size No. 1. No. 2. No. 3.

Will take 1 $\frac{3}{4}$ 3 4 in. mouldings.

Price 2/2 2/10 4/- pair.

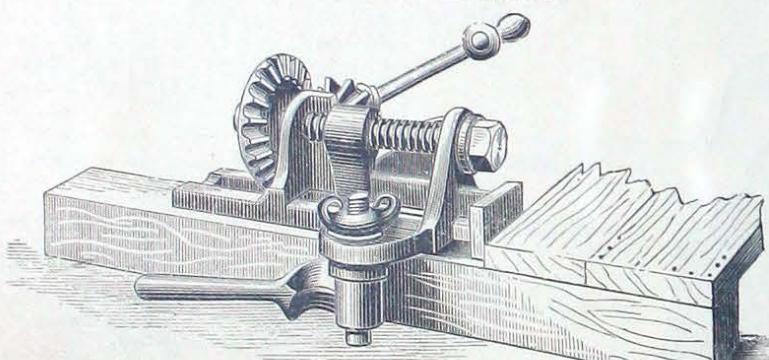
The Improved Corner Cramp is intended for gripping securely two sides of a picture frame during the process of nailing together.

CIRCULAR SAW SPINDLE
(with Fast Pulley on end).

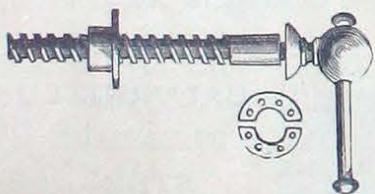
N 6900.—With white metal bearings and large oil cups.

	Length overall.	Diameter of Pulley.	Diameter of Spindle.	Price.
No. 1	17 $\frac{1}{2}$ in.	2 $\frac{3}{8}$ in.	1 in.	28/9 each.
No. 2	23 in.	3 $\frac{3}{8}$ in.	1 $\frac{1}{4}$ in.	40/6 "
No. 3	27 in.	4 $\frac{3}{8}$ in.	1 $\frac{5}{8}$ in.	53/- "

FLOORING CRAMP.



N 6523.—Will take in any size of joist from 1 $\frac{1}{2}$ to 4 inches ... 14/6 each
Second quality, ditto, ditto ... 11/- "

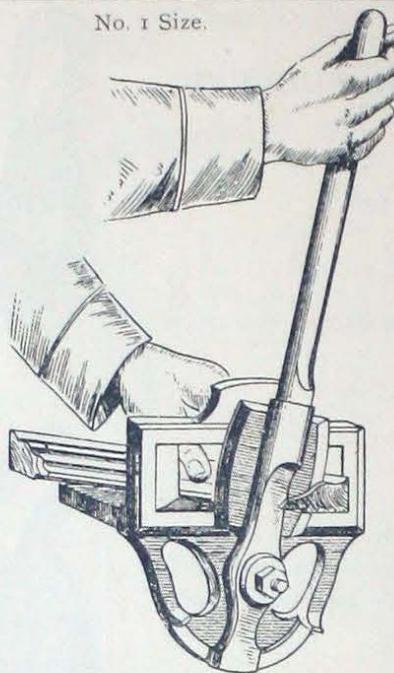


BENCH SCREWS.

	Length	18	20	21	22	inch.
	Diameter	1 $\frac{1}{8}$	1 $\frac{1}{4}$	1 $\frac{5}{8}$	1 $\frac{1}{2}$	"
N 6524.—Best Bright	...	6/6	7/6	10/-	11/6	each.
N 4308.—Best Black	...	5/3	6/6	—	—	"
N 6527.—Iron, with wood handle, 15 x 1 $\frac{1}{8}$ inch	2/3	...	"
N 6528.—Beech Wood, 24 x 2 $\frac{1}{2}$ inch	1/2	...	"

The varieties described represent in many cases but a small selection from those supplied.

No. 1 Size.

REGISTERED
MITRE CUTTING
MACHINE.

N 6522.

No. 1 Size.

To cut 2 inch mouldings.

Mitre cutting machine

complete ... 11/6

Extra cutter ... 2/3

No. 2 Size.

To cut 4 inch mouldings.

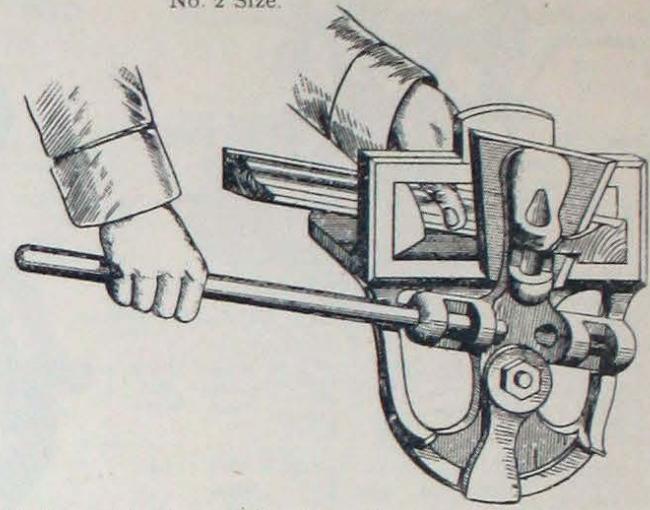
Mitre cutting machine

complete ... 20/-

Extra cutter ... 4/-

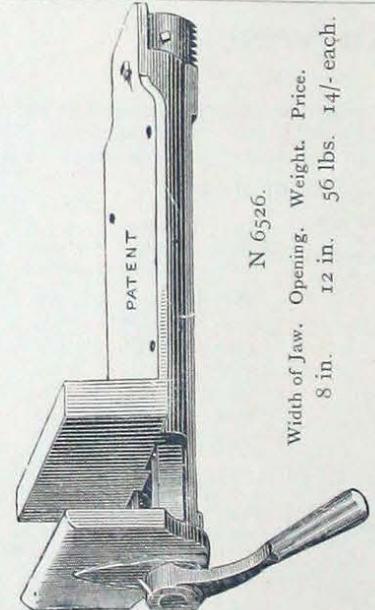
Invaluable to Joiners, Picture-frame Makers, and Amateurs.

No. 2 Size.



Each machine is carefully adjusted and tested. The moulding is held as shown above, care being taken that it bears against guide-pin at back; also that a very light shaving be taken off for the finishing cut.

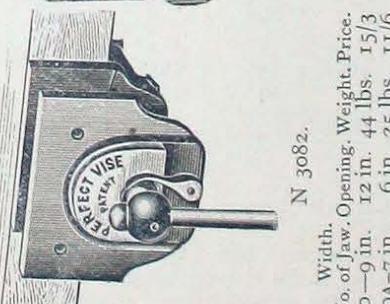
"INSTANTANEOUS GRIP" BENCH VICES.



N 6526.

Width of Jaw. Opening. Weight. Price.

8 in. 12 in. 56 lbs. 14/- each.



N 3082.

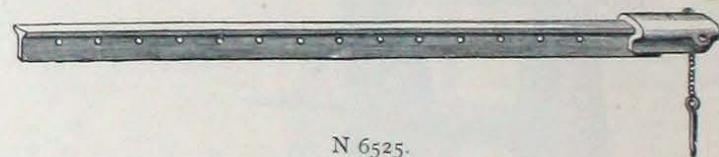
Width. No. of Jaw. Opening. Weight. Price.

10-9 in. 12 in. 44 lbs. 15/3

10-7 in. 6 in. 25 lbs. 11/6

11-10 $\frac{1}{2}$ in. 12 in. 49 lbs. 17/6

BEST WROUGHT IRON CARPENTERS' T CRAMPS.



N 6525.

Prices—Length of bar, 42 inches, will take in 35 inches ... 12/- each.
" " 48 " " 41 " " ... 13/3 "

" " 54 " " 47 " " ... 13/6 "

" " 60 " " 53 " " ... 13/9 "

" " 72 " " 65 " " ... 14/6 "

Lengthening bars 24 36 48 inch.

3/9 5/9 7/6 each.

PATENT STEEL T CRAMPS.



N 4309.

Prices—Length of bar, 36 inches, will take in 30 inches ... 14/6 each.
" " 42 " " 36 " " ... 14/6 "

" " 48 " " 42 " " ... 15/- "

" " 54 " " 48 " " ... 15/6 "

" " 60 " " 54 " " ... 16/- "

" " 72 " " 66 " " ... 18/- "

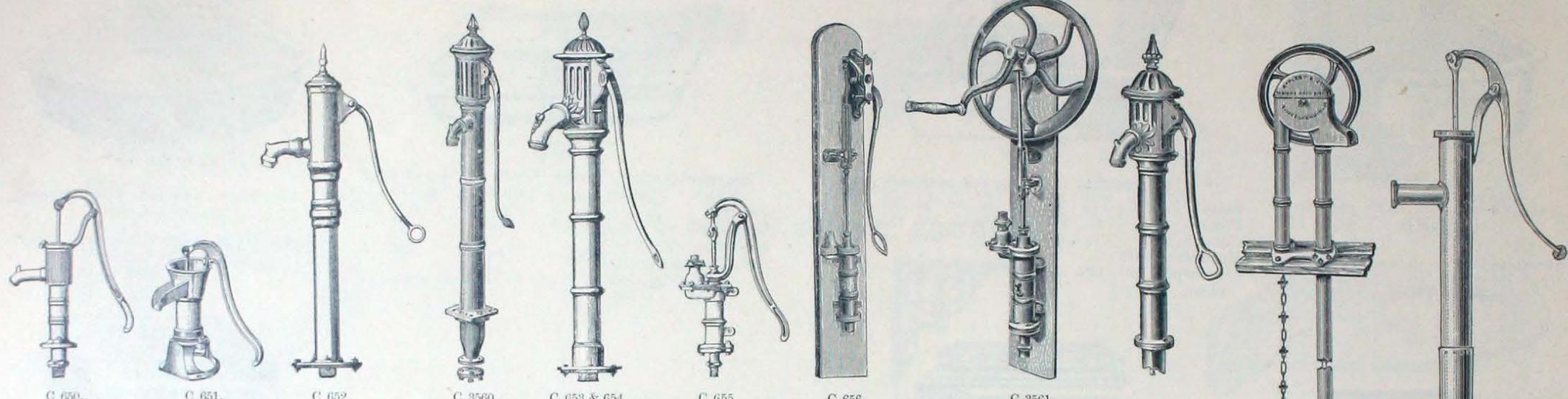
SASH CRAMP.

Length of bar 18 24 30 36 inch.

N 4310.—Prices 10/3 11/6 12/9 14/- per pair.

Further details will be sent on receipt of requirements.

PUMPS.



C 650.—Improved Cistern Pump, with Brass Union for lead or screwed for iron pipe. Handle and spout are reversible.

Sizes	2½	3	3½	4	4½	5 inch.
Bore of Suction Pipe	1½	2	2½	3	3½	4½ "
Price	11/9	14/6	14/6	14/6	14/6	each.

With side ears to screw on plank or bracketed tail at same price.

C 651.—Pitcher Pump, with Reversible Handle, fitted with Brass Unions for iron or lead pipe.

Sizes	2½	3	3½	4	4½	5 inch.
Size of Suction Pipe	1	1½	1½	1½	1½	"
Price	12/-	13/6	14/9	16/3	16/3	"

With bracketed tail for fixing to wall or cart at same price.

C 652.—Yard or Garden Pump, with Boxes—

Sizes	3	3½	3½	4	4½	5 inch.
For lead or cast iron pipe	33/6	37/6	41/6	45/9	57/6	66/6 each.
For wrought iron pipe	3½	40	44	52	—	— "
Wrought galvanized pipe for do.	9d.	9d.	11d.	13	—	— per ft.
Size of pipe	1½	1½	1½	1½	2	inch.
Pump without boxes, for lead pipe	27/-	30/6	33/6	40/-	48/-	56/- each.
Bends, drilling blast holes, and cutting to length charged extra.						

C 650.—Cottage Pump with wrought iron fittings, brass or copper lining, flange for lead or wrought iron pipe, elastic joints, bolts and nuts complete, 3 ft. under spout.

Size	3	inch.
Bore of suction pipe	1½	or 2 inches.
Price	42/-	each.

C 653.—Improved Yard Pump, with Conical Valves, for cast or wrought iron pipe, 3 feet under spout.

Sizes	2½	3	3½	4	4½	5 inch.
Bore of Suction Pipe	1½	2	2	2	2½	3 "
Price	61/-	75/6	81/6	90/-	107/-	134/6 each.

For lead pipe, 4/- extra.

C 654.—Ditto, cheaper make, with ordinary valves—

Sizes	2½	3	3½	4	4½	5 inch.
Price	43/-	47/-	53/-	61/-	each.	

C 655.—Improved Lift and Force Pump, with Brackets or Flanged Base, for iron or lead pipe, reversible handle.

Sizes	2	2½	2½	2½	3	3½	4 inch.
Bore of Suction and Delivery Pipe	1	1	1½	1½	1½	1½ or 2	"
Price	35/6	38/6	42/-	44/-	48/6	61/6	each.
Extra for copper cylinder	3/4	4/-	4/9	5/3	6/9	8/6	"

C 656.—Lift and Force Pump, on Oak Plank—

Sizes	2½	3	3½	4	4½	5 inch.
Bore of Suction and Delivery Pipe	1½	1½	2	2	2	"
Brass Barrel, connections for lead or iron pipe	93/-	107/6	126/6	146/6	each.	
Iron Barrel, with copper or brass linings and brass unions for lead or iron pipe	63/6	71/-	86/6	94/6	"	

C 657.—Wheel Motion Lift and Force Pump, on Oak Plank—

Sizes	2½	3	3½	4	4½	5 inch.
Bore of Suction and Delivery Pipe	1½	1½	2	2	2	"
Brass Barrel, connections for lead or iron pipe	105/6	124/-	146/-	168/-	each.	
Iron Barrel, with brass lining and unions	81/-	101/6	126/6	146/-	"	

C 657.—Strong Deep-Well Lift Pump, suitable for wells from 27 ft. to 100 ft. in depth, with india-rubber joints, bolts, and nuts complete, ready for fixing.

Doors for access to bucket and valve are recommended.

Bore of pump top and main pipes	3½	4	4½	inch.
Bore of working barrel	3	3½	4	"
Complete for wells 30 ft. deep	139/6	161/6	182/6	"
Extra per foot exceeding 30 ft. deep	3/6	4/-	4/6	"
Extra for doors for access to bucket, &c.	13/9	15/9	19/-	"

C 658.—Lift and Force Pump, with wrought iron working arrangement mounted on oak plank, and painted iron suction and delivery pipes, bend at surface, rods, roller guide box, &c., complete for 30 ft. well.

Sizes	2½	3	3½	4	inch.
Bore of Suction and Delivery Pipe	1½	1½	2	2	"
Price—Iron, with copper or brass lining—	£7 12 6	£8 16 0	£11 4 0	£12 16 0	each.
If Brass Force Pump, with do., do., do.—	£8 19 0	£10 11 6	£13 0 0	£15 9	"
Extra per foot above 30 ft. deep—	2/-	2/6	3/3	3/3	"
Iron Air Vessel	13/-	14/6	16/3	18/-	extra.
Copper do.	24/6	26/9	31/9	35/-	"

We recommend Air Vessels for Deep Wells.

C 659.—Improved Chain Pump, covered Pattern, 12 ft. under spout—

Sizes	2	2½	3	3½	inch.
Price	£6 0 0	£6 14 6	£7 9 6	£8 19 6	each.

Extra if lengthened between spout & ground line— 2 2½ 3 3½ in.

For the first foot ... 6/6 7/2 7/10 8/6 per ft.

Extra length over one foot ... 6/9 7/6 8/6 10/6 "

" if lengthened below ground line ... 5/2 5/9 6/2 7/6 "

A cheaper pattern also supplied.

C 660.—Galvanized Wrought Iron Liquid Manure or Contractor's Pump, 8 ft. under spout.

Sizes	4½	6	inch.
Price	46/-	55/-	each.

Additional Pipe for 4½ in., 1/-; for 6 in., 1/2 per foot.

C 661.—Iron Retaining Valve, screwed both ends, for iron pipe—

Sizes	1½	2	2½	3	inch.
Price	5/-	6/6	8/3	10/3	13/6 each.

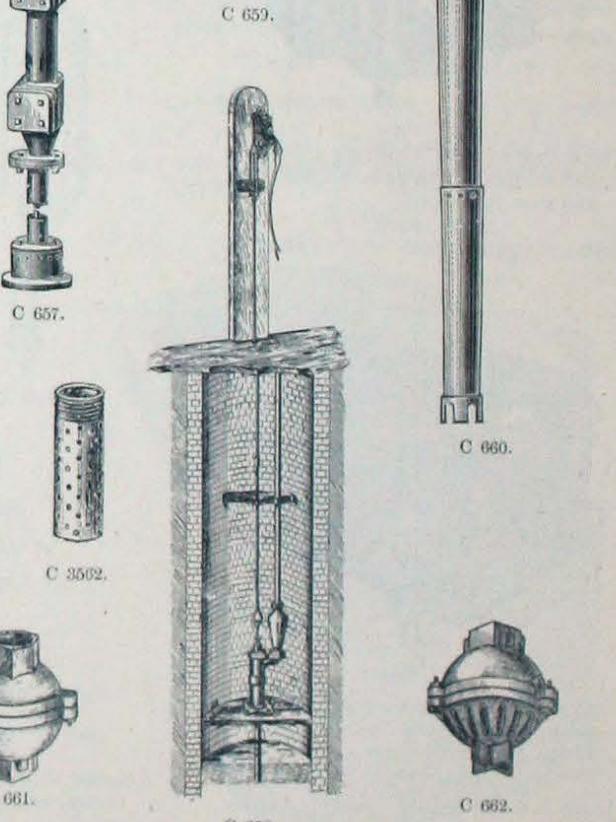
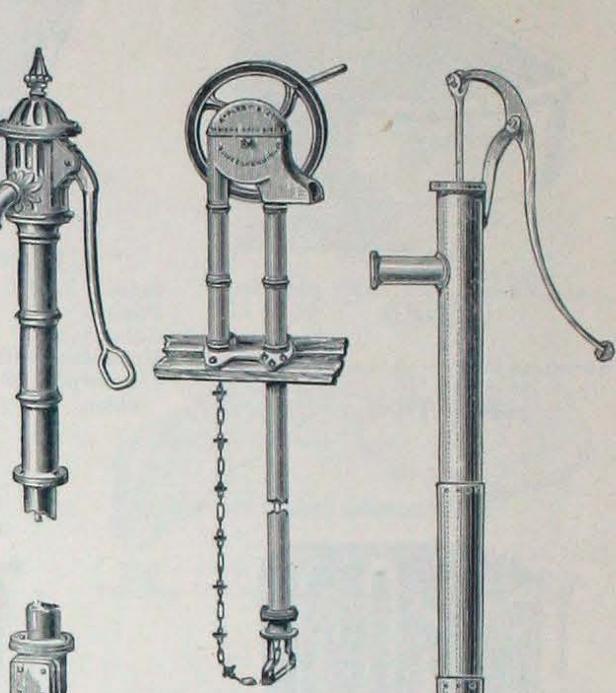
C 662.—Iron Strainer, screwed, for iron pipe—

Sizes	1½	2	2½	3	inch.
Price	3 6	4/-	5/6	6/9	8/3 each.

C 663.—Galvanized Strainer, for wrought iron tube—

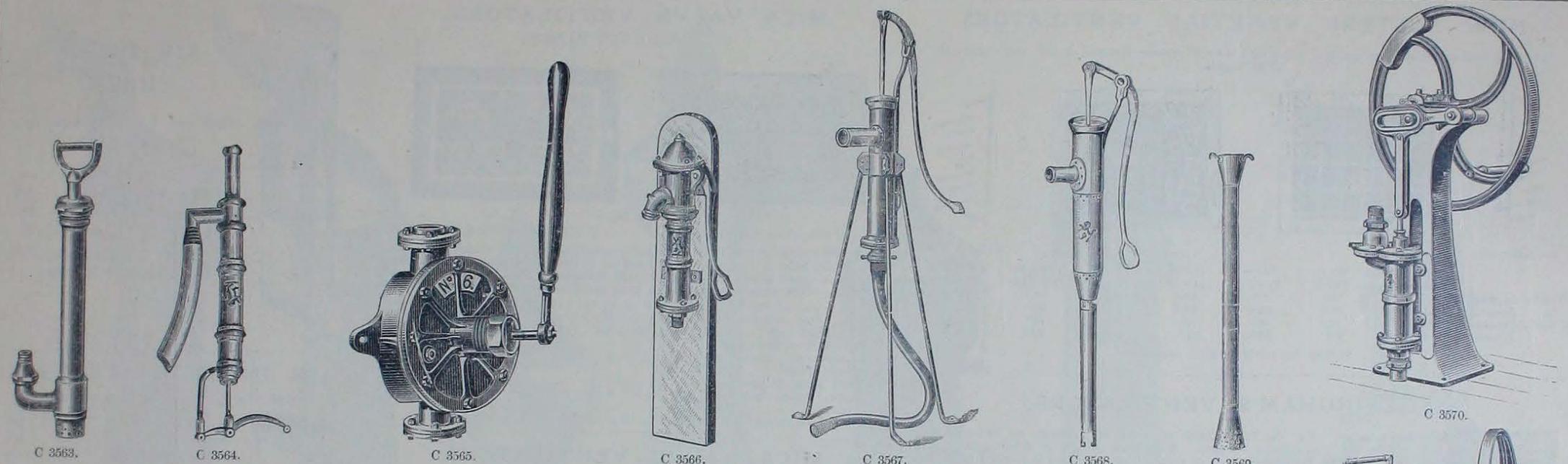
Sizes	1½	2	2½	3	inch.
Price	2/4	3/3	4/9	4/9	each.

Further details and designs will be sent on receipt of requirements.



PUMPS.

201



C 3563.—Brass Plumbers Force Pump, with brass ram plunger—
Sizes $1\frac{1}{2}$ $2\frac{1}{4}$ inch.
Price 18/6 34/6 each.

C 3564.—Ditto, ditto, with ordinary lever handle—
Size $2\frac{1}{4}$ inch.
Price 47/- each.

C 3565.—New pattern Semi-Rotary Double Action Lift and Force Pump, iron with gun metal valves—
Size of Suction and Delivery } $\frac{1}{2}$ $\frac{3}{4}$ 1 $1\frac{1}{4}$ $1\frac{1}{2}$ 2 $2\frac{1}{2}$ 3 inch.
Price 24/- 27/6 35/6 44/- 60/6 96/6 177/- 272/- each.

Ditto, ditto, Gun Metal Pump, with gun metal valves } 34/- 44/- 61/6 73/6 105/- 206/- 350/- 525/-,,
gun metal valves

C 3566.—"York" Cottage Pump, strongly made, and fitted with copper lining and brass union, screwed for wrought iron tube or for lead pipe, bolted on strong oak plank—

Sizes...	... ...	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	inch.
Bore of Suction Pipe	... ...	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	inch.
Price	... ...	30/-	34/6	40/6	47/6	each.

Extra for Brass Bucket and Valve 5/- 6/- 7/6 9/9 "

C 3567.—Galvanized Sheet Steel or Wrought Iron Portable Pump, on legs, 5 ft. 6 in. long, with brass union for 2 inch hose—

Size	... ...	$4\frac{1}{2}$	inch.
Bore of Suction Hose	... ...	2	inch.

Price 63/- each.

C 3568.—Ditto, ditto, 7 ft. 6 in. under spout—

Sizes	... ...	3	4	5	6	7	8	9	inch.
Bore of Suction Pipe	... ...	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	inch.

Price 61/6 66/- 71/6 82/6 122/6 149/- 173/- each.

C 3569.—Sliding Suction Pipe, 8 ft. long, for ditto, for use when liquid has to be raised from variable depths—

Size of Bore	... ...	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	inch.
Price	... ...	20/6	21/9	21/6	27/6	31/-	35/-	40/6	each.

C 3570.—Strong Wheel Motion Lift and Force Iron Pump, with compensating lever fitted with brass unions, mounted on strong cast iron standard

frame, suction and delivery chambers fitted for wrought iron tube or lead pipe; rim of fly-wheel made to take belt for power—

Sizes	... ...	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	inch.
Bore of Suction and Delivery Pipe	... ...	$1\frac{1}{4}$	$1\frac{1}{2}$	2	2	$2\frac{1}{2}$	"

Price £10 9 6 £11 3 0 £11 16 6 £12 14 0 £21 5 6 each.

Do. do., Brass pump, with brass unions } £12 7 6 £13 1 6 £15 2 6 £16 3 0 £26 2 6 each.
brass unions

C 3571.—Single Barrel Deep Well Force Pump, square tail iron barrel, with copper or brass lining, and bucket rod—

Sizes	... ...	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	inch.
Bore of Pipe	... ...	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	"

Price 33/6 37/6 48/- 59/6 72/- each.

Ditto, ditto, all brass ... 52/- 65/- 77/6 92/6 109/- "

C 3572.—Single Barrel Deep Well Force Pump, with doors for access to valves, iron barrel, fitted with copper or brass lining, gun metal bucket rod, and brass valve seats—

Sizes	... ...	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	inch.
Bore of Pipe	... ...	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	$2\frac{1}{2}$	$2\frac{1}{2}$	3	"

Price £4 8s. £5 9s. od. £6 11s. £8 16s. £11 4s. £14 8s. £20 16s. ea.

Ditto, ditto, Gun metal pump with brass bucket and valves—

Sizes	... ...	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	inch.
Bore of Pipe	... ...	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	$2\frac{1}{2}$	$2\frac{1}{2}$	3	"

Price £5 10s. 6d. £7 0s. £8 2s. 6d. £10 8s. £13 0s. £17 17s. 6d. £26.

C 3573.—Strong Well Engine Frame, with single barrel iron force pump, for hand power—

Sizes	... ...	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	inch.
Bore of Suction and Delivery Pipes	... ...	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	"

Price £14 16 0 £15 12 0 £16 8 0 £17 12 0 each.

Ditto, ditto, with Brass Pump ... £16 5 0 £17 9 6 £18 5 6 £20 6 6 each.

C 3574.—Strong Engine Frame, and superior double barrel deep Well Pumps, with doors for access, also rods, roller guide box, suction and delivery pipes, and strainer; complete for Well 30 ft. deep, with iron pumps—

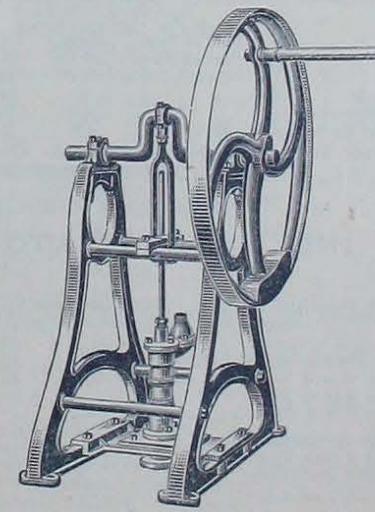
Sizes	... ...	2	3	$3\frac{1}{2}$	4	inch.
Bore of Suction and Delivery Pipes	... ...	$1\frac{1}{2}$	2	2	$2\frac{1}{2}$	"

Price £35 4s. £36 16s. £39 4s. £44 0s. each.

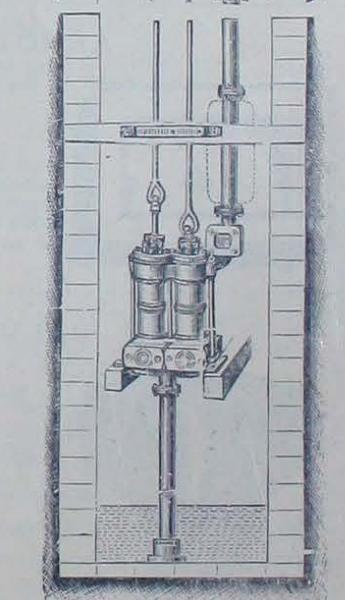
Ditto, ditto, with Brass Pumps £37 7s. 6d. £39 1fs. 6d. £43 1s. 6d. £48 15s. "

Extra for Well over 30 ft. deep 4/- 4/6 4/9 5/3 per foot.

" " Iron Air Chamber 29/- 29/- 36/6 36/6 each.



C 3573.

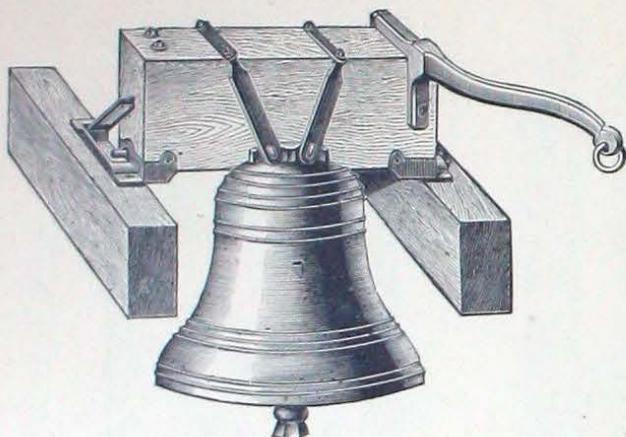


C 3574.

Further details will be sent on receipt of requirements.

BELLS, CARRIAGE JACKS, &c.

SCHOOL, DINNER, OR ALARM BELLS.



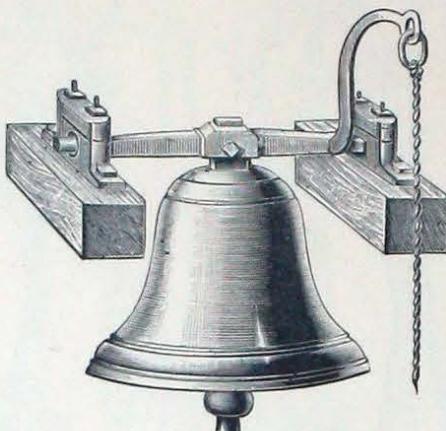
S 3653

Hung with wood Stock and Cranked Iron Lever, improved turned Steel Gudgeons, Iron Slings, heavy Gun-metal Bearings in Cast Iron Shoes with hinged covers, and Bolts and Nuts for fixing.

Best quality Bells, 1/5 $\frac{1}{2}$ per lb.

Fittings for 12 13 14 15 16 in. bell.
31/6 35/6 39/6 41/- 42/6 per set.

Weights of bells are about as follows:—
8 9 10 11 12 13 14 15 16 17 18 20 in.
10 14 21 30 40 52 70 84 102 118 144 212 lbs.



S 3654.

Hung with Wrought Iron Stock and Cranked Lever, Cast Iron Journals (Gun-metal Bearings), with long Pins and Nuts for fixing.

Best quality bells, 1/5 $\frac{1}{2}$ per lb.

Fittings for—
8 9 10 11 12 13 14 in. bell.
11/- 11/- 11/- 13/6 15/- 15/9 17/6 per set.

Cheaper fittings also supplied without
Gun-Metal bearings.



S 3655.

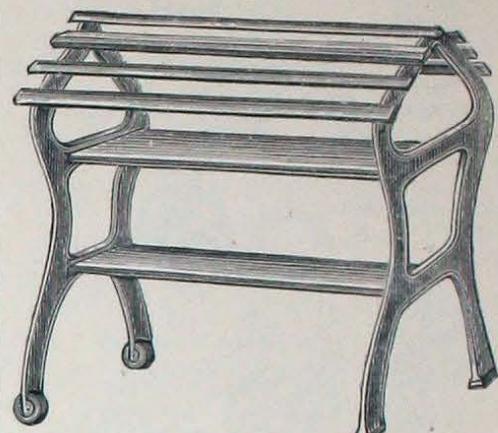
Hung in Cast Malleable Iron Frame for fixing against a building. The above drawing represents the bell as rung from the outside, but the axle may be so arranged that the bell can be rung from the inside of the building.

Best quality bells, 1/5 $\frac{1}{2}$ per lb.

Fittings for 10 11 12 in. bell.
30/- 31/6 39/6 per set.

To ring inside with extended axle through
wall, 4/- extra and upwards.

HARNESS CLEANING HORSE.

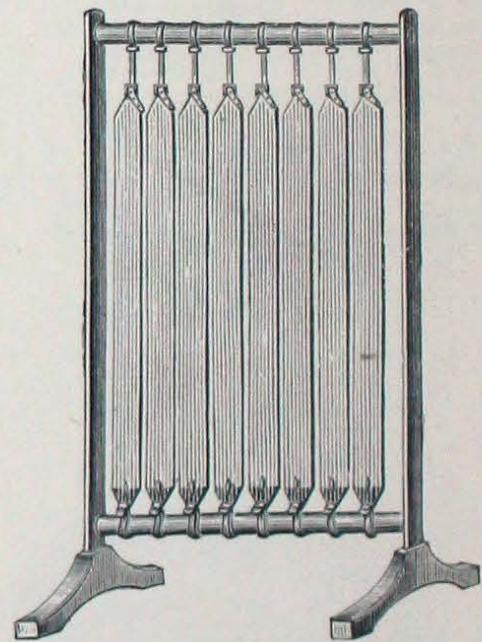


S 153.

On wheels, iron frame, wood top, and two wood shelves, painted.

Price, 40/- each.

GIRTH STRETCHER.



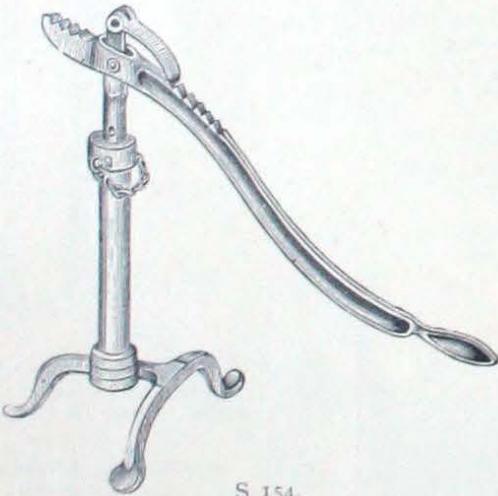
S 157.

With galvanized hooks and leather straining straps.
Price, 23/6 each.

Iron Girth Stretcher, with straps, japanned black.
Price, 8/6 each.

Ditto, ditto, scarlet, blue, or galvanized.
Price, 10/6 each.

IMPROVED TELESCOPE CARRIAGE LIFTING JACK.

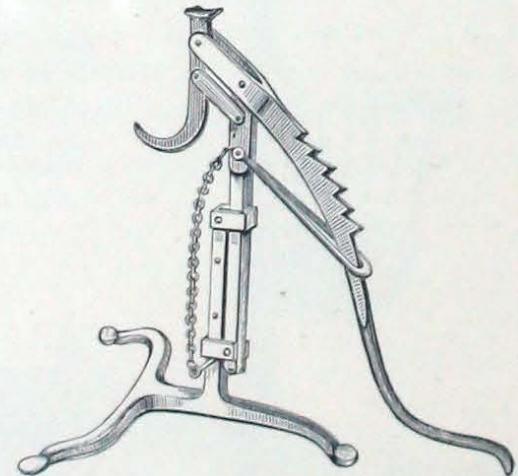


S 154.

This Jack will lift a carriage, cart, or wagon with the greatest ease, and is universally commended for its strength and lightness, being made entirely of wrought and malleable iron.

No. 1.—For light carriages ... price 13/9 each.
No. 2.—For heavy ... 18/- ...
No. 3.—For extra heavy carriages ... 23/3 ...

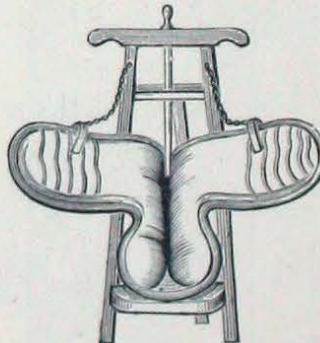
WROUGHT IRON CARRIAGE LIFTING JACK.



S 155.

Nos.	1	2	3
Price	10/6	12/6	14/6 each.

OAK SADDLE AIRER.



S 152.

This is a useful portable stand for airing and drying saddles, firmly holding saddles in position without injury whilst being dried.

Price, 21/6 each.

Further details will be sent on receipt of requirements.

GALVANIZED IRON EARTH CLOSET FITTINGS.

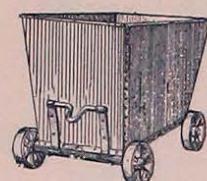
231



S 160.—Scoop and Chain
13/9 dozen.
1/4 each.

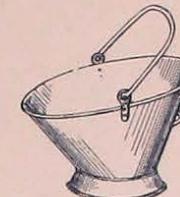


S 161.—Guide,
12/3 dozen.
1/2 each.

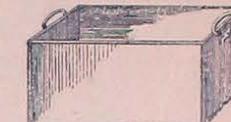


S 162.—Tank on wheels, to remove either from
the front (as drawn), back, or side of closet,
galvanized body ... 23/9 each.

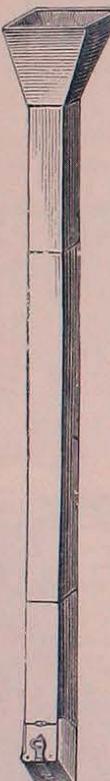
Ditto, without wheels, but straps carried under
bottom, to slide, 20/6 each



S 163.—Pail.
To hold 10 charges ... 32/- dozen; 3/- each.
To hold 20 charges ... 38/- .. 3/7 ..
Covers for ditto ... 19/- .. 1/9 ..



S 164.—Box with handles, 19 1/2 in
x 12 in. x 10 in. deep,
5/9 each.
Other sizes to order.



S 168.

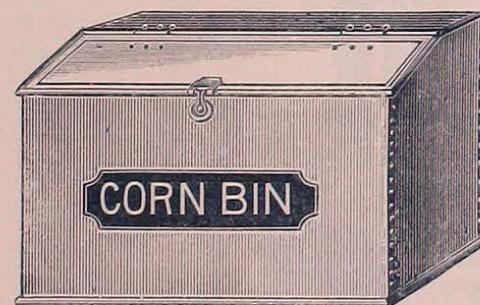
Improved Corn Meter.

The corn being put into the hopper from the loft,
it can be drawn off as required, by means of the
shut off valve, so that a proper quantity may be
taken without waste.

Meter, quarter peck ... 9/6 each.

Hopper 4/6 ..

Supply Pipe 1/3 per foot.



S 3665.

Galvanized Rectangular Corn Bin, with hinged
cover, and hasp for padlock.

Sizes 4 6 8 12 16 bushel.
23/9 27/- 32/9 40/6 51/6 each.

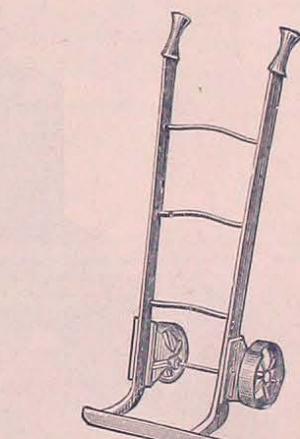
Divisions ... 3/6 each extra.



S 170.

Galvanized Circular Corn Bin, with hinged
cover, and hasp for padlock.

Sizes 2 4 6 8 bushel.
15/- 19/- 23/6 27/- each.



S 171.

Wrought Iron Sack Truck,
12/6 each.

If with India Rubber Tyres,
17/6 each.

Wood ditto, 17/6 or 21/6 each.

Further details will be sent on receipt of requirements.

